Kementerian Negara Perencanaan Pembangunan Nasional/
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RENCANA AKSI

REHABILITASI DAN REKONSTRUKSI WILAYAH PASCABENCANA GEMPA BUMI DI PROVINSI SUMATERA BARAT TAHUN 2009 - 2011

State Ministry for National Development Planning

ACTION PLAN

FOR

REHABILITATION AND RECONSTRUCTION OF POST-EARTHQUAKE AREAS IN WEST SUMATERA PROVINCE

2009-2011

EXECUTIVE SUMMARY

OF

ACTION PLAN FOR REHABILITATION AND RECONSTRUCTION OF POST-EARTHQUAKE AREAS IN WEST SUMATERA PROVINCE

Earthquake shocked West Sumatera and its surrounding areas on 30 September 2009, at 17:16:09 hours. Based on information from BMKG (Meteorological, Climatology and Geophysical Agency of Indonesia), with an estimated magnitude of 7.6 on the Richter Scale. The epicentre lied on coordinates 0.84 Southern Latitude – 99.65 Eastern Longitude, in a depth of 71 km under the sea, 57 km southwest of Pariaman, West Sumatera. 22 minutes later at 17:38:52 an aftershock occurred with a magnitude of 6.2 on the Richter Scale. The epicentre lied on coordinates 0.72 Southern Latitude – 99.94 Eastern Latitude, in a depth of 110 km and 22 km southwest of Pariaman, West Sumatera.

The shocks were also felt in Singapore and Malaysia, as well as in other areas of Sumatera such as Aceh, Jambi, Riau, Bengkulu and North Sumatera.

Based on the latest data issued by the DM Coordinating Unit of West Sumatera Province and BNPB (National Agency for Disaster Management) per 18 October 2009, a total of 1.117 people were killed, 1.214 severely injured, 1.688 sustained minor injuries and 410 were evacuated, majority in Padang Pariaman District and Padang City. Furthermore, according to the latest update on 28 October 2009, a total of 249.833 houses were damaged consisting of 114.797 with severe damages, 67.198 with moderate damages and 67.838 lightly damaged. The earthquake also damaged a number of government buildings, health facilities, educational facilities, trade facilities, hotels and financial and banking buildings/offices.

Estimation of post-disaster loss and damage indicated that the most severe damage and loss occurred in the housing component with an assessed damage and loss reaching Rp. 15,41 trillion. The infrastructure sector sustained damage and loss in the amount of Rp. 963 billion, social sector Rp. 1,52 trillion, economic sector Rp. 2,3 trillion and cross-sector (government and environment sub-sectors) sustained damage and loss in the amount of Rp. 674,6 billion. Hence, the total amount of damage and loss was Rp. 20,86 trillion.

Based on the recovery needs assessment performed through coordination with the local government and BNPB, the total needs for post-earthquake recovery in West Sumatera province is estimated to reach Rp. 6,41 trillion consisting of Rp. 3,16 trillion for housing recovery, Rp.

661,9 billion for infrastructure recovery; Rp. 1,268 for social facility and infrastructure recovery; Rp. 189,43 billion for economic recovery and cross-sector, including Rp. 1,097 trillion for government offices.

Potential natural disasters in West Sumatera Province include earthquake, tsunami, volcanic eruption, flood, drought, typhoon, tidal wave and abrasion as well as landslides. Lessons learned from the West Sumatera earthquake are the absence of early warning system as well as familiarisation with disaster risk factors; the lack of knowledge and preparedness of the community in dealing with disasters; and the absence of policy and institutional framework for disaster management in the local regions.

Framework for Rehabilitation and Reconstruction in West Sumatera Province.
Based on the estimation of damage and loss as well as post-disaster needs assessment in West Sumatera Province, the recovery strategy will provide extra priorities on: (1) **Recovery of Housing and Settlement Infrastructures**; (2) **Recovery of Public Infrastructures**; (3) **Social Recovery**; which are focused on the recovery of basic public services as well as services for vulnerable and poor groups; (4) **Recovery of Productive Economy**; which seeks to immediately restore local and community economic activities; and (5) **Cross-sector Recovery**; particularly rebuilding and repairing government buildings in order to restore services to the community.

With consideration to the scale and impact of the damage, recovery activities will be performed for 2 fiscal years, initiated with preparatory activities in the 4th quarter of the 2009 fiscal year, during the 2010 fiscal year and concludes in 2011 fiscal year.

The general strategy for the post-earthquake recovery in West Sumatera province is established with observance to: (1) Social, economic and cultural conditions of the community; (2) Environmental conservation and disaster risk reduction; (3) Benefits and effectiveness of the assistance for the natural disaster victims; and (4) Coverage in 12 disaster affected districts/municipalities in West Sumatera.

Planning for rehabilitation and reconstruction activities is an inseparable part of the national development planning system regulated in Law No. 25/2004. Fundings for the rehabilitation and reconstruction activities are sourced from APBN (state budget), APBD Province (provincial budget), APBD District/Municipality (district/municipality budget) and the community. The Action Plan for Rehabilitation and Reconstruction is a policy integrated into the national and local development planning systems. In relation to the annual planning and budgeting mechanisms, The Action Plan for Rehabilitation and Reconstruction is put in the Work Plan of the Central Government for the formulation of RAPBN (state budget plan), and Work Plan of Provincial/District/Municipality Government for the formulation of RAPBD (local budget plan), in accordance with the mechanisms of applicable regulations and laws.

Implementation of rehabilitation and reconstruction. The Action Plan for Rehabilitation and Reconstruction - which is formulated through coordination with West Sumatera Provincial Government and BNPB - will be followed up by BNPB to be established through the decision of the Head of BNPB. The executing agent of the rehabilitation and reconstruction will be West Sumatera Provincial Government through the support of a technical team established at the central government level. The rehabilitation and reconstruction will be performed in a systematic, integrated and coordinated manner so that the need to repair facilities and infrastructures in every sector may be implemented effectively and efficiently as well as in compliance with applicable provisions.

Monitoring for the implementation of rehabilitation and reconstruction is performed as a control measure for the rehabilitation and reconstruction, while evaluation is performed to ensure the achievement of minimum standards of service, the improvement of the disaster management performance and compliance with applicable regulations and laws. Monitoring and evaluation of activities funded by APBN will be performed by the central government in coordination with the State Ministry for National Development Planning (Bappenas) and the National Agency for Disaster Management (BNPB). Monitoring and evaluation of activities funded by APBD (local budget) will be performed by the Local Development Planning Agency (Bappeda) and the Local Disaster Management Agency (Bappeda) at the provincial as well as district/municipality level of the post-disaster areas.

Sustainability of post-disaster recovery is performed through the integration of disaster management regulatory framework into the medium term and long term local development framework as well as through the reform of disaster management institution, in accordance with Law No. 24/2007 concerning Disaster Management and other relevant regulatory laws.

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CHAPTER I

Foreword

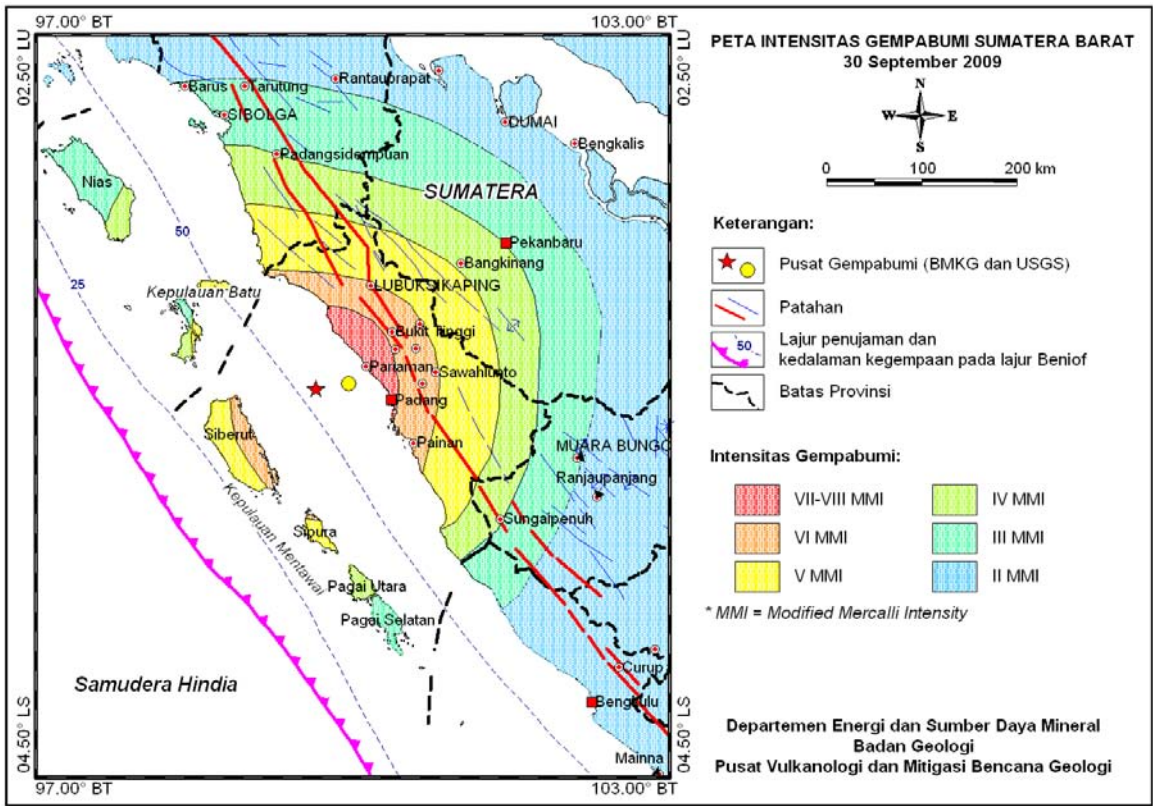
Not long after a 7.3 magnitude earthquake affecting Tasikmalaya on 2 September 2009, Indonesia was once again shocked by an earthquake. In less than one month's period - to be exact on Wednesday, 30 September 2009, 17:16:09 hours - a major earthquake occurred in West Sumatera Province. Based on information from BMKG (Meteorological, Climatology and Geophysical Agency of Indonesia), the earthquake was estimated to be of a 7.6 magnitude on the Richter Scale with an epicentre on coordinates 0.84 Southern Latitude – 99.65 Eastern Longitude, in a depth of 71 km under the sea, 57 km southwest of Pariaman, West Sumatera. 22 minutes later at 17:38:52, an aftershock occurred with a magnitude of 6.2 on the Richter Scale. The epicentre lied on coordinates 0.72 Southern Latitude – 99.94 Eastern Latitude, in a depth of 110 km under the sea, 22 km southwest of Pariaman, West Sumatera.

The earthquake caused severe damages to buildings and houses at several regions, particularly those closest to the epicentre. The impact of the damage included the following areas:

1. Padang City
2. Padang Panjang City
3. Solok City
4. Pariaman City
5. Pasaman District
6. West Pasaman District
7. Agam District
8. Padang Pariaman District
9. Tanah Datar District
10. South Pesisir District
11. Mentawai Archipelago District
12. Solok District

Padang City, Padang Pariaman District and Pariaman City were the worst affected areas. The violent tremor of the earthquake damaged numerous office buildings and houses. Furthermore, the geological composition of the closest areas to the epicentre - which are made up of volcanic alluvium and sedimentation rocks of quarternary age as well as tertiary age that are loose, disintegrated and not well compacted – has the characteristic of amplifying the effect of the earthquake tremor.

Table I.1
Intensity of West Sumatera Earthquake



Source: Centre of Vulcanology and Geological Disaster Mitigation, Geological Agency, Ministry of Energy and Mineral Resources

The earthquake was due to the subduction of the Indian Ocean tectonic plate under the Asian plate in the west coast of Sumatera. The earthquake did not cause a tsunami as the epicentre was relatively deep under the sea, thus having inadequate energy to generate a tsunami. The tremor of the earthquake was also felt in Singapore, Malaysia as well as in other areas of Sumatera including Aceh, Jambi, Riau, Bengkulu and North Sumatera. One day following the earthquake (1 October 2009 at 08.52.29 hours) another earthquake occurred in Jambi Province with a magnitude of 7.0 on the Richter Scale. The epicentre was located 10 km under the ground, 46 km southeast of Sungai Penuh, Jambi Province. Kerinci District and Marangin District were estimated to sustain the most severe impact.

I.2. INTENT AND PURPOSE

This Post-earthquake Rehabilitation and Reconstruction Action Plan is a programme and activity plan which is intended to:

1. Develop common perception and commitment among the central government, provincial government, district/municipality government, business community, public,

universities, and NGOs, in order to rebuild all aspects of the community life affected by the disaster in West Sumatera Province;

2. Harmonise all post-earthquake rehabilitation planning activities developed by the central government, in this case the line ministries, provincial government and district/municipality governments affected by the earthquake in West Sumatera Province;

3. Synchronise plannings undertaken by the central, provincial and district/municipality governments with the Local Medium Term Development Plan (RPJMD);

4. Combine and harmonise the post-disaster rehabilitation and reconstruction planning with the annual plans of the central, provincial and district/municipality governments into the work plan of the central and local governments;

5. Provide a clear description to stakeholders on the implementation of the post-earthquake rehabilitation and reconstruction to prevent overlapping rehabilitation and reconstruction activities;

6. To develop system and mechanism for funding mobilizations from APBN (the state budget), APBD Province (provincial budget), APBD District/Municipality (district/municipality budget) and the community, in an efficient, effective, participatory and accountable manner, in accordance with the principle of good governance.

Whereas the purpose of this Post-earthquake Rehabilitation and Reconstruction Action Plan is to:

1. Develop a common understanding among the central and local governments as well as the national and local communities to ensure a smooth implementation of the rehabilitation and reconstruction;

2. Undertake planning for the post-earthquake rehabilitation and reconstruction in accordance with the National Development Planning System;

3. Harmonise the planning and budgeting of programmes and activities with the national and local planning documents;

4. Ensure participatory and consultative planning and budgeting, incorporating inputs from all stakeholders;

5. Facilitate monitoring and control of the post-earthquake rehabilitation and reconstruction activities;

6. Ensure adherence to prudence and accountability principles in the utilisation and management of funds for the post-earthquake rehabilitation and reconstruction activities;

I.3. SCOPE

The scope of the formulation of the rehabilitation and reconstruction action plan consist of: (1) Housing and settlement infrastructure sector; (2) Infrastructure sector; (3) Social sector; (4) Productive economy sector; and (5) Cross-sector, which are described in the following chapters:

Chapter One The background, intent, purpose, scope and implementation timeframe of the Post-earthquake Rehabilitation and Reconstruction Action Plan.

Chapter Two Brief Description of the area prior to the disaster in terms of : (1) conditions of housing, facilities and infrastructures; (2) social and cultural conditions; (3) economic conditions as well as other factors influencing the level of vulnerability of the area and the community.

ChapterThree, presents the conditions of the disaster affected areas, consisting of: the disaster, death toll and damages to buildings and houses as well as responses of the central and local governments as well as the community. This chapter also briefly describes the methods of the recovery needs assessment performed, among others: (1) Damage and Loss Assessment method; (2) Human Recovery Needs Assessment method; (3) Damage and Loss Estimation for the housing and settlement sector, infrastructure sector, social sector, productive economy sector, and cross sectors;
and (4) The impact of the earthquake on the local economy.

Chapter Four presents the disaster risk analysis as well as disaster management and reduction efforts at the government and community levels, from the perspectives of policy, institutional, capacity and availability of resources from the central government, community as well as international institutions.

Chapter Five describes the funding strategy for the rehabilitation and reconstruction, including the funding needs and available funding allocations for the post–earthquake rehabilitation and reconstruction in West Sumatera Province.

Chapter Six describes the principle, policy and strategy of the post–earthquake rehabilitation and reconstruction in West Sumatera Province. It also includes the management of the implementation of the rehabilitation and reconstruction which consists of: (1) Institutional arrangement for the implementation of rehabilitation and reconstruction; (2) Management of rehabilitation and reconstruction assets; (3) Exit transition; as well as (4) continuity and sustainability of the post-rehabilitation and reconstruction recovery.

I.4. TIME FRAME FOR REHABILITATION AND RECONSTRUCTION IMPLEMENTATION

The time frame for the implementation of the rehabilitation and reconstruction is determined by considering the magnitude of the damage and loss, the amount of funds needed for the recovery as well as the available resources and capacity of the government and the community. Funds for the implementation of rehabilitation and reconstruction are sourced from the government (APBN and APBD Province/District/Municipality), public and private funds, as well as international donor assistance. The rehabilitation and reconstruction are performed in compliance with the provisions of applicable

regulations and laws, with the application of accountable and transparent management principles.

The Action Plan for Post-earthquake Rehabilitation and Reconstruction in West Sumatera Province will be implemented over a period of 18 months, starting from the 2009 fiscal year up to the 2011 fiscal year, in accordance with the applicable fiscal calendar. With observance to the affected sectors, the recovery activity will give extra priorities to the worst affected sectors which have significant impact to the local socio-economic life. Based on the damage and loss assessment and the recovery needs assessment, the most severely affected sectors are the housing and settlement infrastructure sector, followed by the productive economy sector, social sector, infrastructure sector and other cross sectors. Therefore, the implementation of the post-earthquake rehabilitation and reconstruction in West Sumatera Province will be focused on the housing and settlement infrastructure sector recovery, followed by the restoration and revitalization of the local economy, social facilities and infrastructures recovery (health and education) and government facilities and infrastructures recovery. The recovery is expected to be completed in the 2010 fiscal year so that:

1. The disaster affected communities may return to their respective homes.

2. Public services may be restored in order to immediately support the restoration of the life and activities of the community.

3. The effort for the revitalisation of the local economy may be expedited.

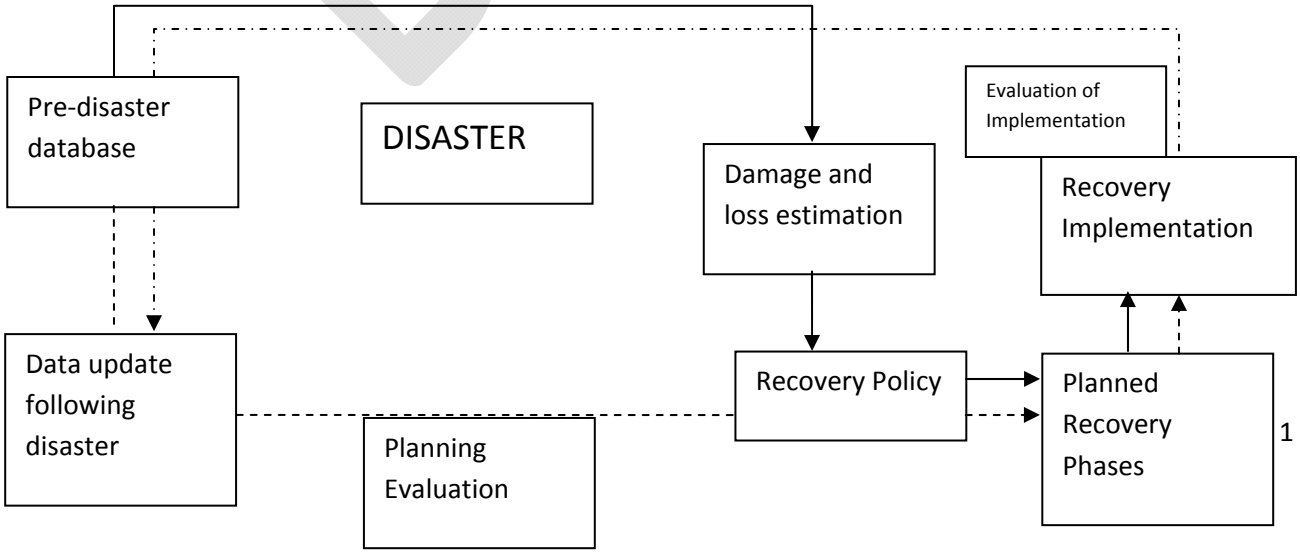
CHAPTER II

GENERAL DESCRIPTION OF DISASTER AFFECTED AREAS

A database needs to be developed to provide quantitative data needed to formulate an action plan for rehabilitation and reconstruction. The database includes geological, geographic, demographic, psychographic, facilities and infrastructures, and socio-economic and cultural conditions at the disaster affected areas, prior to the disaster.

The database is urgently needed to develop the Post-earthquake Rehabilitation and Reconstruction Action Plan which will serve as a reference to formulate planning policy, work plan, activity implementation, as well as evaluation of the rehabilitation and reconstruction. Other important aspect is the data update following the disaster, used to determine the extent of damage and loss caused by the earthquake (the flow is illustrated in the following diagram).

Diagram II.1.
Database Flow Chart for Planning Purposes



The central and local governments agreed to use the 2007 and 2008 village potential data prepared by the National Bureau of Statistics for the formulation of the Post-Disaster Rehabilitation and Reconstruction Action Plan. Data from the West Sumatera provincial government will also be used as a secondary data.

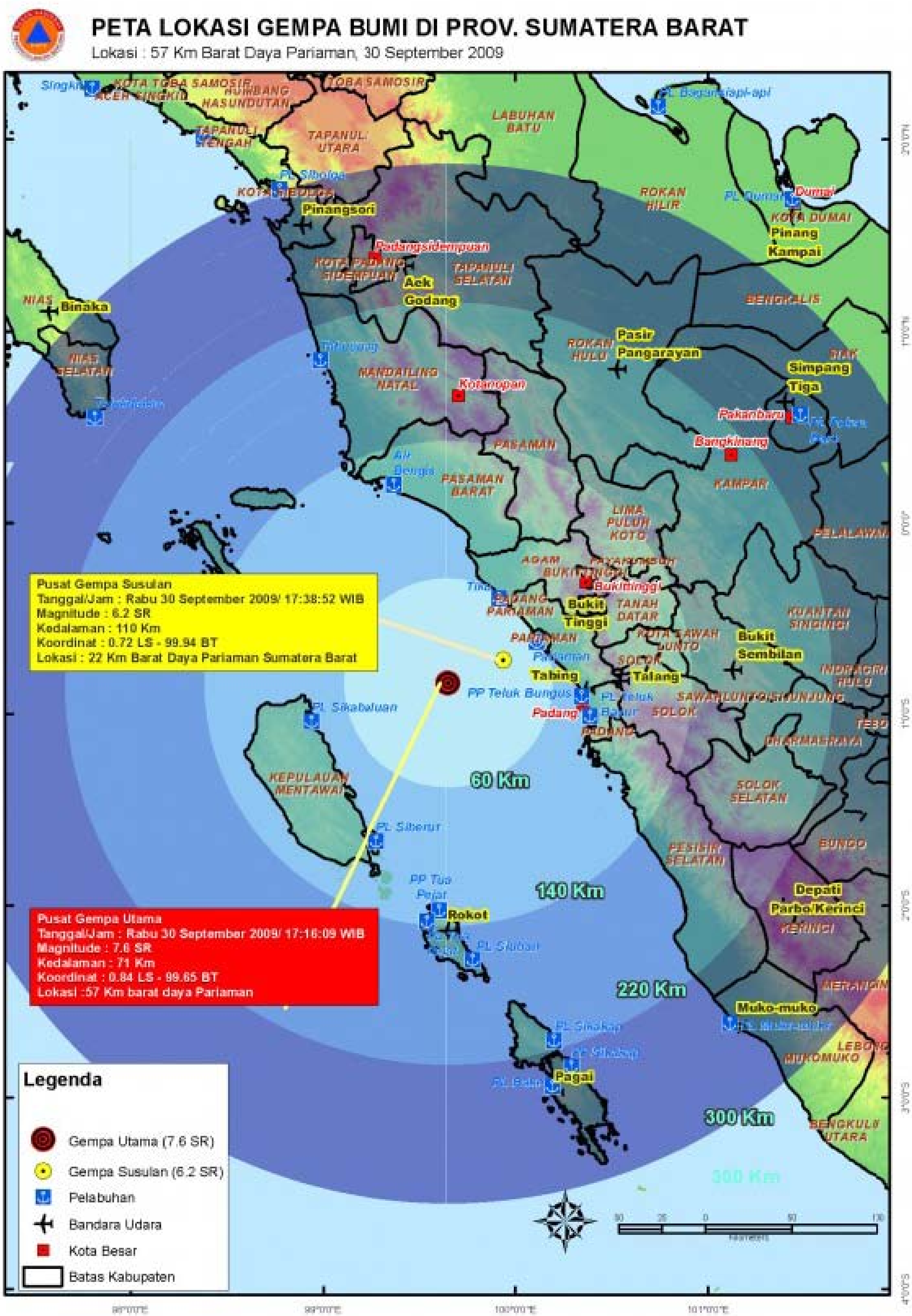
II.1. LOCATIONS AFFECTED BY THE DISASTER

Areas affected by the impact of the tectonic earthquake include all districts/municipalities in West Sumatera, however, the most severe damage occurred in Padang City, Districts of Padang Pariaman, Agam and South Pesisir.

Tanjung Mutiara and Lubuk Basung sub-districts in Agam District sustained relatively severe damages, while Kinali and Tiku sub-districts in West Pasaman sustained severe damages. Padang Pariaman District and Padang City sustained the most severe damages with buildings and infrastructures destroyed and the highest death toll.

The earthquake shock – which according to USGS reached 7,9 magnitude on the Richter Scale – was even felt in some areas of Sumatera such as Bengkulu, South Sumatera, North Sumatera, Aceh, Riau up to neighbouring Malaysia and Singapore. Tsunami warning was issued for Indonesia, Malaysia, Thailand and India by Pacific Tsunami Warning Centre. However, having been observed that the earthquake did not trigger tsunami waves within an hour period, the warning was cancelled. The following table shows the distribution of locations affected by the West Sumatera earthquake on 30 September 2009.

Table II.1.
Map of Earthquake Locations in West Sumatera Province


PETA LOKASI GEMPA BUMI DI PROV. SUMATERA BARAT
Lokasi : 57 Km Barat Daya Pariaman, 30 September 2009
Pusat Gempa Susulan
Tanggal/Jam : Rabu 30 September 2009/ 17:38:52 WIB
Magnitude : 6.2 SR
Kedalaman : 110 Km
Koordinat : 0.72 LS - 99.94 BT
Lokasi : 22 Km Barat Daya Pariaman Sumatera Barat
Pusat Gempa Utama
Tanggal/Jam : Rabu 30 September 2009/ 17:16:09 WIB
Magnitude : 7.6 SR
Kedalaman : 71 Km
Koordinat : 0.84 LS - 99.65 BT
Lokasi :57 Km barat daya Pariaman
60 Km
140 Km
220 Km
300 Km
Legenda
Gempa Utama (7.6 SR)
Gempa Susulan (6.2 SR)
Pelabuhan
Bandara Udara
Kota Besar
Batas Kabupaten
Pinangsori
Padangsidempuan
Ack Godang
Binaka
Pasir Pangarayan
Simpang Tiga
Pakanbaru
Bangkinang
Kotanopan
Bukittinggi
Bukit Tinggi
Tabing
Talang
Padang
Bukit Sembilan
Rokot
Depati Parbo/Kerinci
Muko-muko
Pagai
Pinang Kampai
Dumai
PP Teluk Bungus
PL Sikabaluan
PL Siberut
KEPULAUAN MENTAWAI
PASAMAN
PASAMAN BARAT
TANAH DATAR
SOLOK
SOLOK SELATAN
PESISIR SELATAN
KAMPAR
ROKAN HILIR
ROKAN HULU
BENGKALIS
KERINCI
BUNGO
MUKOMUKO
LABUHAN BATU
TAPANULI UTARA
TAPANULI SELATAN
MANDAILING NATAL
NIAS
NIAS SELATAN

II.2 RISK STATUS

Based on the earthquake history of West Sumatera earthquake zone, the current earthquakes occurring in Padang and its surrounding areas are simply part of a long earthquake history. The history of major and destructive earthquakes in Padang reflects the tectonic conditions of the active and complex seismic zone.

Based on historical records, West Sumatera has indeed experienced several destructive earthquakes. At least 14 major and destructive earthquakes occurred in West Sumatera since 1822 to 2009, several of them caused tsunamis.

The active and complex seismic conditions of the West Sumatera earthquake zone is made up of two earthquake generators. First, earthquake generator from western zone of Sumatera consisting of plate subduction zone with the potential to cause major earthquakes followed by tsunamis. Majority of the hypocentres of earthquakes triggered by the plate subduction activity are located is western water of Sumatera due to the convergence of subterranean continental plates. West Sumatera in fact is more prone to earthquake due to the plate activities in the subduction zone characterised by its relatively larger magnitude.

The second earthquake generator is the fault zone of Sumatera or more popularly known as Semangko Fault. Semangko Fault is an extremely active on land fault splitting Sumatera Island into two, extending along Bukit Barisan Mountain Range, from Semangko Bay in Sunda Strait to northern Aceh territory. The 7,0 magnitude earthquake shocking the Sungai Penuh community on Thursday (1/10/2009) - with an epicentre 160 km from Padang City - was caused by the activity of the Semangko Fault. The energy released by the main 7,6 magnitude Padang earthquake caused by the plate subduction appeared to trigger on land plate activities.

Therefore, based on the historical data of earthquakes in Sumatera, approximately 20 major and destructive earthquakes occurred in this fault zone in the past 100 years. Research shows that earthquake activity in Semangko Fault occurs every 5 years. Although of relatively small magnitudes, earthquakes occurring in this fault zone may pose significant threats due to their on land sources and close proximity to settlement areas.

The people of West Sumatera must anticipate the likely occurrence of a major tectonic earthquake with a tsunami potential, which may pose significant threats to the densely populated areas along the west coast of Sumatera, particularly West Sumatera and Bengkulu Provinces.

The epicentre of the 30 September 2009 earthquake, located 52 km from Padang, southwest of Pariaman, indicated that this earthquake was not the anticipated major earthquake, which epicentre is located in the continental tectonic fault, west of Mentawai Archipelago. This

is the fault segment that has not released the extraordinary energy it accumulated in the past 200-300 years. This is the actual source of earthquake with the last earthquakes occurring in 1797 and 1833 which created a major tidal wave hitting the west coast of West Sumatera and Bengkulu.

II.3. CONDITIONS OF PUBLIC HOUSING, FACILITIES AND INFRASTRUCTURES

West Sumatera Province has adequate transportation infrastructure network such as network of main roads, several ports, Minangkabau International Airport, Tabing Air Force Base, Rokot Airport (Sipora Island), and Simpang Empat Airstrip which was constructed but was never used. The sea ports are located in Padang (Teluk Bayur and Bungus), Air Bangis, and Tiku, and several ports on Mentawai Archipelago (Siberut, Tuapejat, Sioban, Sikakap).

The West Sumatera road network consist of mountainous and hilly roads with some roads located on flat plains. Some of the roads located on the flat plains are aligned along the coast with close proximity between the road and the varying coast line. The mentioned Minangkabau, Tabing and Rokot airports are closely located to the coast and face the Indian Ocean. The closest airport to West Sumatera are Jambi, Pekanbaru, Bengkulu airports and an airfield in Sibolga (Pinangsori).

During normal conditions, the transportation infrastructures are in relatively good states. Nearly all of the infrastructures facilitate the flow of passengers and goods, crucial to the life and economy of West Sumatera and its surrounding areas. Following the 30 September 2009 earthquake however, Padang City became a dead city due to power outage and disrupted telecommunications. Apart from that, public facilities such as Pasar Raya Padang were partly burnt and collapsed, a number of office buildings including hotels/lodgings, hospital such as M. Jamil Hospital along with several shopping centres collapsed, trapping many people underneath the building rubbles. The victims rescue were hindered due to limited equipment, cut off road access to West Sumatera and several days of heavy rain following the earthquake. The Padang-Padangpanjang toll road was cut off due to landslides. Furthermore, Bukittinggi-Medan-Bengkulu route was also cut. Vehicles could not pass through for several days. Many road sections in Padang Pariaman were cut off due to landslides.

Not only that the roads ruptured and were covered by landslides, numerous houses also collapsed, such as in Padang Pariaman District. In Padang Panjang, the approximately 10 km road from Selaying Bawah (near the waterfall) up to the market in Padang Panjang was covered by landslides. Other road access to Padang such as through Maninjau, Agam District were also hit by landslides and were heavily damaged.

Approximately 85 % infrastructures in West Sumatera were damaged by the earthquake (Source: West Sumatera Road Infrastructure Agency, 19 October 2009). Based on the data of

the West Sumatera Disaster Management Coordination and Implementation Unit, 178 roads were heavily damaged, 63 moderately damaged and 51 lightly damaged. 68 bridges were damaged, consisting of 21 severely damaged, 30 with moderate damages and 17 sustaining minor damages. Severely damaged roads at four points in Padang Pariaman and one point on km18 Padang–Solok route need urgent repairs. The damage at the four points on Padang Pariaman relatively disrupts relief delivery and recovery activities as well as reconstructions at a number of remote areas in the district. The four points are located in East V Koto Sub-district, in the direction of Nagari Padang Alai as well as Patamuan. Two areas were most severely affected by the earthquake, with most of the populations in evacuation. The km18 Padang–Solok route is also critical as it is a national road linking Padang and Solok District as well as other districts in the southeast regions.

The earthquake also damaged educational facilities. 1.384 school buildings were severely damaged, 1.018 moderately damaged and 744 were lightly damaged. Furthermore, 237 government offices were severely damaged, 78 sustained moderate damages and 26 with minor damages. While 16 bridges sustained severe damages, 28 moderately damaged and 5 sustained minor damages. 40 irrigation channels were heavily damaged, 24 with moderate damages and 22 lightly damaged.

Not only did the 7,9 magnitude earthquake affected majority of the road network, airports and seaports, it in fact caused massive landslides on a number of hills, burying 3 villages located at the bottom of a hill. The landslides also caused rupture and subsidence at several bodies of roads (non-state/provincial roads). The hills at the edge of Maninjau Lake also sustained severe landslides at various areas.

According to experts, an 8.0 magnitude earthquake would have created critical landslides because the road network in West Sumatera partly consists of mountainous and hilly roads such as the road crossing Anai Valley, Padang-Solok Road, Lubuk Selasih-Muara Labuh, Bukittinggi-Maninjau, Matur-Lubuk Basung, Payakumbuh-Riau border, a part of the Sumatera toll road and others. In the event that the bodies of roads located in the mountainous and hilly areas are destroyed by the earthquake, a number of disaster affected areas in West Sumatera (particularly Padang City) will be potentially isolated, hindering the critical delivery of first aid and rescue.

Although the earthquake did not produce tsunami, West Sumatera has a very likely potential for a major tsunami earthquake. The main concern is that the main road is located almost entirely along the coastline of West Sumatera. Minangkabau and Tabing airports are only less than 2 km from the coastline, facing the Indian Ocean and so are the case with ports of Telukbayur, Airbangis and others. The ports along the west coast also susceptible to severe damages and disabilities.

In the event that Minangkabau and Tabing airports are damaged and disabled, the closest alternatives would be Pekanbaru, Jambi, Pinangsori and Bengkulu airports which are located a considerable distance away. Should the coastal road be cut off by tsunami at several places, a number of densely populated cities/villages along the coast are highly likely to be isolated. The damage to transportation infrastructures in the 30 September 2009 earthquake would isolate a number of disaster areas and impede early emergency assistance from reaching the victims.

Other factor that needs to be taken into account is the condition of Batang Arau River before Muaro, which branches out through Banda Buek, flowing around the eastern part of Padang City and subsequently turning around towards the sea. A number of roads towards higher areas in the eastern part of the city must cross those rivers. In the northern direction, there is also a river heading towards the sea. The 2004 Aceh Tsunami showed that the tsunami wave entering the centre of Banda Aceh in fact passed through the river which flowed through the city centre. A sudden tsunami inflow through the rivers in Padang will damage bridges located along the rivers (among others Siti Nurbaya Bridge), cutting off refugee evacuation route to higher areas in eastern Padang (Indarung, Gunung Padang, Limau Manih and others).

II.4. SOCIAL AND CULTURAL CONDITIONS

The population of Padang is 4.697.764 people, with the most populated being Padang City, followed by South Pesisir District, Agam District and others as illustrated in the following table:

Table II.1.
2007 Census Data of West Sumatera Province per District/Municipality and Gender

	Number of Population		
District/Municipality	**Male**	**Female**	**Total**
District			
Mentawai	35.418	31.799	67.217
South Pesisir	214.715	221.245	435.960
Solok	176.588	174.927	351.515
Swl/Sijunjung	97.625	99.981	197.606
Tanah Datar	160.464	174.668	335.132
Padang Pariaman	178.687	205.849	384.536
Agam	213.520	214.825	428.345
Lima Puluh Kota	164.114	165.407	329.521
Pasaman	124.367	128.781	253.148
West Pasaman	166.096	161.692	327.788

Dharmasraya	89.279	86.294	175.573
South Solok	64.716	65.642	130.358
Municipality			
Padang	406.368	431.822	838.190
Solok	29.137	27.983	57.120
	Number of Population		
District/Municipality	**Male**	**Female**	**Total**
Sawahlunto	26.419	27.494	53.913
Padang Panjang	24.748	27.269	52.017
Bukit Tinggi	51.336	52.942	104.278
Payakumbuh	54.516	50.532	105.048
Pariaman	33.539	36.960	70.499
West Sumatera	**2.311.652**	**2.386.112**	**4.697.764**

Source: Central Bureau of Statistics of West Sumatera Province, 2008

Based on the data of the Natural Disaster Management Coordination and Implementation team of West Sumatera per Thursday, 8/10/2009, 242 people were reported missing, 784 were killed, 867 severely injured, 1.374 sustaining minor injuries and 410 people evacuated. While 122.964 houses were severely damaged, 58.457 moderately damaged and 59.186 sustained minor injuries.

In terms of cultural perspective, 3 Rumah Gadang (traditional houses) – part of the cultural heritage of Pariaman City, West Sumatera – were also severely damaged. This was identified from the result of the Post-disaster Damage to Cultural Heritage Survey Team, Crisis Centre Coordinator, West Sumatera Office of Culture and Tourism.

The result of the survey conducted by the team also found that cultural heritage buildings in Padang City generally sustained severe damages. Cultural buildings in five areas of Padang City (Batang Arau, Pasar Mudi, Pasar Malintang, and Pasar Gadang) sustained 80% damage. Whereas in Pasar Batimpuk areas, only some cultural heritage buildings were damaged. The loss due to the damage was estimated Rp. 1 billion excluding immaterial loss considering the cultural heritage objects were priceless assets of the state.

The five areas surveyed had some 50 buildings from the Dutch Colonial era. The buildings generally sustained structural damages. West Sumatera Library and National Archive building was also reported to be severely damaged and even collapsed. Other buildings with various historical collections such as Adityawarman Museum sustained minor damages in the rear part while West Sumatera Cultural Theme Park was damaged on the outside.

II.5. ECONOMIC CONDITION

West Sumatera has relatively considerable economic potential. The west coast and Mentawai Archipelago areas have numerous marine bio-diversities of high economic values. Fishermen may obtain various species of fish in this area. Grouper, shrimp, sea weed, crab and pearls are among the top marine products. The coastal areas – particularly Mentawai Archipelago area – produce large quantities of coconuts. Rubber, clove and pepper plantations occupy the hilly and mountainous areas. The forest in the mountain also produce timbers. The difficult terrain caused by numerous steep slopes in the hilly or mountainous areas are the main challenge to the development of the agricultural and plantation sectors in West Sumatera.

The mining potential in West Sumatera consists of group A, B and C. Group A consists of coal in Sijunjung District and Sawahlunto City. Whereas B Group Mining consists of mercury, sulphur, iron sands, brass, lead and silver spread in the districts of Sijunjung, Solok, Lima Puluh Kota, Pasaman and Tanah Datar. C Group Mining is spread throughout districts/municipalities in West Sumatera, the majority of which consists of sands, stones, gravels with obsidians and andesites in Padang Pariaman. One of the minerals that have provided a significant benefit to West Sumatera is limestone as a base material for the cement industry. PT. Semen Padang has been utilising the natural resource for decades. Large deposits of limestone are located around Padang, Singkarak Lake and Padang Panjang. In Padang Panjang alone, exploitable limestone deposits reached 43 million tonnes.

The industry in West Sumatera is dominated by small scale and home industries. The total number of industries is 47.819 units consisting of 47.585 small industries and 234 large and medium industries, with a ratio of 203:1. In 2001, large and medium industry investments in West Sumatera reached Rp. 3.052 billion or 95,60% of the total investment, whereas small industry investment was only Rp. 1.412 billion or 4,40% of the total investment. The production value of large and medium industries in West Sumatera reached Rp. 1.632 billion, namely 60% of the total production value, and the production value of small industries only reached Rp. 1.090 billion, or 40% of the total production value. In developed countries such as the US and Western Europe, the small industries contributes to as much as 80% of the total production value.

The abundant West Sumatera water resource has also benefited the local development. Singkarak and Maninjau lakes have long been used as steam powered electricity generators. The water resource also creates the potential for the development of a mineral water industry.

Apart from that, the natural beauty and culture of Minangkabau are well renowned and create the potential for the development of the tourism industry. Each district and municipality in West Sumatera has at least one natural or cultural tourist attraction. For example natural scenery from Teluk Bayur beach, captivating mountainous regions, lakes, canyon, and valleys or cultural objects. The cultural attractions of West Sumatera have good development prospect. The cultural heritage of Minangkabau such as Rumah Gadang as well as the culture of the people of Mentawai are unique and have good tourism potential.

West Sumatera Province has various tourists destinations such as Singkarak Lake (largest in West Sumatera), Maninjau Lake, Twin Lakes, Sianok Canyon, Anai Valley, Harai Valley as well as Cubadak Island.

Equally as important as the previous sector, experience from the economic crisis have thought us that unlike large scale enterprises which utilise imported raw materials, small and medium enterprises supported by local resources – particularly in the agricultural and small industry sectors – are resistant to the impact of the economic crisis and were able to survive. Apart from that, small scale enterprises are the source of income of majority of West Sumatera population (80% of the households in the region). However, due to the lack of capital, technology and marketing, majority of the small scale enterprises have not been able to provide decent livelihood for the people.

The agricultural sector remains the most dominant sector of West Sumatera economy. The average contribution of the agricultural sector in nearly all districts is 30%. While main sectors in the urban areas are trade, hotel and restaurants, transportation, telecommunication and services. The contribution of the processing industry sector to the GDP of West Sumatera has been fluctuating in the past five years. It decreased from 12,25 percent in 2005 to 11,38 percent in 2004. Between 2006 and 2008, it increased from 11,42 percent to 12,01 percent to 12,11 percent. This increase was due to the increase in the small industry, leather goods and footwear subsectors (the largest contributor) from 4,78 percent in 2007 to 4,85 percent in 2008 and the cement and non-metallic mineral product subsectors from 2,70 percent in 2007 to 2,81 percent in 2008. The food, beverage and tobacco subsector is the second largest contributor to the industrial sector. Its contribution decreased from 3,08 percent in 2007 to 3,06 percent in 2008.

Table II.8.
Contribution of the Economic Sector to Regional GDP based on Current Price (%) for 2004-2008

SECTOR	2004	2005	2006	2007	2008
Agriculture	24,27	25,59	25,26	24,67	24,46
Mining and Quarrying	3,52	3,39	3,45	3,44	3,33
Processing Industry	12,25	11,38	11,42	12,01	12,11
Electricity, gas and clean water	1,47	1,49	1,42	1,37	1,22
Construction	5,37	5,53	5,61	5,50	5,53
Trade, hotel & restaurant	18,80	17,46	16,96	17,34	17,74
Transportation and communication	12.28	13,81	15,13	15,07	15,02
Finance,	5,17	5,03	4,96	4,96	4,90

Rental & Corporate Services					
Services	16,87	16,31	15,79	15,64	15,68
RGDP	**100,00**	**100,00**	**100,00**	**100,00**	**100,00**

Up to 2008, West Sumatera economic sector remained to be dominated by three main sectors consisting of agriculture, trade, hotel and restaurant as well as services sector. The total contribution of those sectors exceeded 57 percent. The agricultural sector contributed 24,27 percent in 2004 and increased to 25,59 percent in 2005, while between 2006 and 2008 its contribution decreased from 25,26 percent in 2006 to 25,26 percent in 2007 to 24,46 percent in 2008. The largest contribution was provided by food crop subsector, particularly paddy which is the main product of West Sumatera. The trade, hotel and restaurant sector was the second largest contributor to West Sumatera GDP. Its contribution decreased from 18,80 percent in 2004 to 17,46 percent in 2005 and 16,96 percent in 2006, and increased from 17,34 percent in 2007 to 17,74 percent in 2008.

The services sector is the third largest contributor to the GDP of West Sumatera. In 2005 however, its contribution decreased from 16,87 percent in 2004 to 16,31 percent in 2005, 15,79 percent in 2006, and 15,64 percent in 2007, and increased to 15,68 in 2008. Apart from the three above sectors, other relatively significant sectors are the processing sector and the transportation and communication sector, which increased over 11 percent in the last five years. The contribution of the processing industry sector in 2008 was 12,11 percent while the transportation and communication sector contributed 15,02 percent.

Table II.10.
2005-2008 Economic Development of West Sumatera Province

NO	INDICATOR	2005	2006	2007	2008
1	West Sumatera GDP, current price (Rp trillion)	44.67	53.03	59.79	71.21
2	RGDP per capita, current price (Rp.000)	9.783,91	11.448,15	12.908,03	14.950,0
3	Per capita regional income,	9.022,74	10.557,30	11.689,47	

	current price				
4	Economic growth (%)	5,73	6,14	6,34	6,41*
5	Domestic investments (Rp. billion)	607,06	234,86	780,00	
6	Foreign investment (US$ million)	85,57	87,42	58,00	
7	Export value (US$ million)	884,89	1,142,99	1.250,00	
8	Import value (US$ million)		60,08	95,58	
9	Inflation (%), up to Nov 2008	20,47	8,06	5,30	12,45

Table II.11.
Increase in Sectoral Employment Opportunities in West Sumatera Province for 2005-2008

SECTOR	YEAR			
	2005	2006	2007	2008
Agriculture	824.940	542.538	596.792	656.471
Mining	13.671	12.494	13.792	15.171
Processing Industry	122.476	65.753	72.328	79.560
Electricity, gas and water	5.169	3.071	3.378	3.715
Construction	61.862	62.788	69.067	75.973
Trade, hotel and restaurant	139.881	162.105	178.316	196.147
Transportation and communication	83.171	80.364	88.400	97.240
Finance	15.405	9.741	10.715	11.786
Services	209.401	119.964	131.960	145.156
Others	1.666	-	-	-

The condition of West Sumatera economy following the earthquake was affected by the damage to the community markets. 37 markets sustained severe damages, 22 moderately damaged and another 22 sustained minor damages. Within several days however, BNPB reported that vital functions which had been disrupted were approaching normal conditions.

Based on the 2006 West Sumatera earthquake experience, the region was able to recover quickly from natural disasters. West Sumatera is considered to have a relatively significant potential for economic growth. In the absence of earthquake, West Sumatera economy have been consistently growing above five percent since 2003. Due to the economic growth potential, a quick response will minimise the negative impact of the earthquake. Based on the 2006 earthquake data, the economic growth dropped to -9.6 percent in the third quarter following the earthquake. In the fourth quarter however, the province achieved a 5,5 percent growth following a quick response from the central provincial as well as district/municipality governments. Although lower than a 5,7 percent growth in 2005, a 2,1 percent growth was achieved. Whereas in 2007, West Sumatera economic growth reached 10,5 percent.

II.6. Preparedness of Government, Community and Private Sector

The local government and the community are aware of the significant impact of disasters and have undertaken several disaster mitigation efforts. A number of state of the art equipment -- capable of detecting early earthquake signals and sending them to a number of domestic as well as overseas meteorological and geophysical stations - have been installed, a number of pamphlets have been prepared and distributed to population in disaster prone areas, evacuation routes have been established, evacuation drills have been performed several times and so on.

The preparedness of the stakeholders was evident in the 30 September 2009 earthquake. This earthquake showed the preparedness of all stakeholders in dealing with a disaster of such magnitude. On the other hand however, the destruction of several large buildings – such as housing, offices and public facilities – showed that the people have not fully complied with or understood the established building codes.

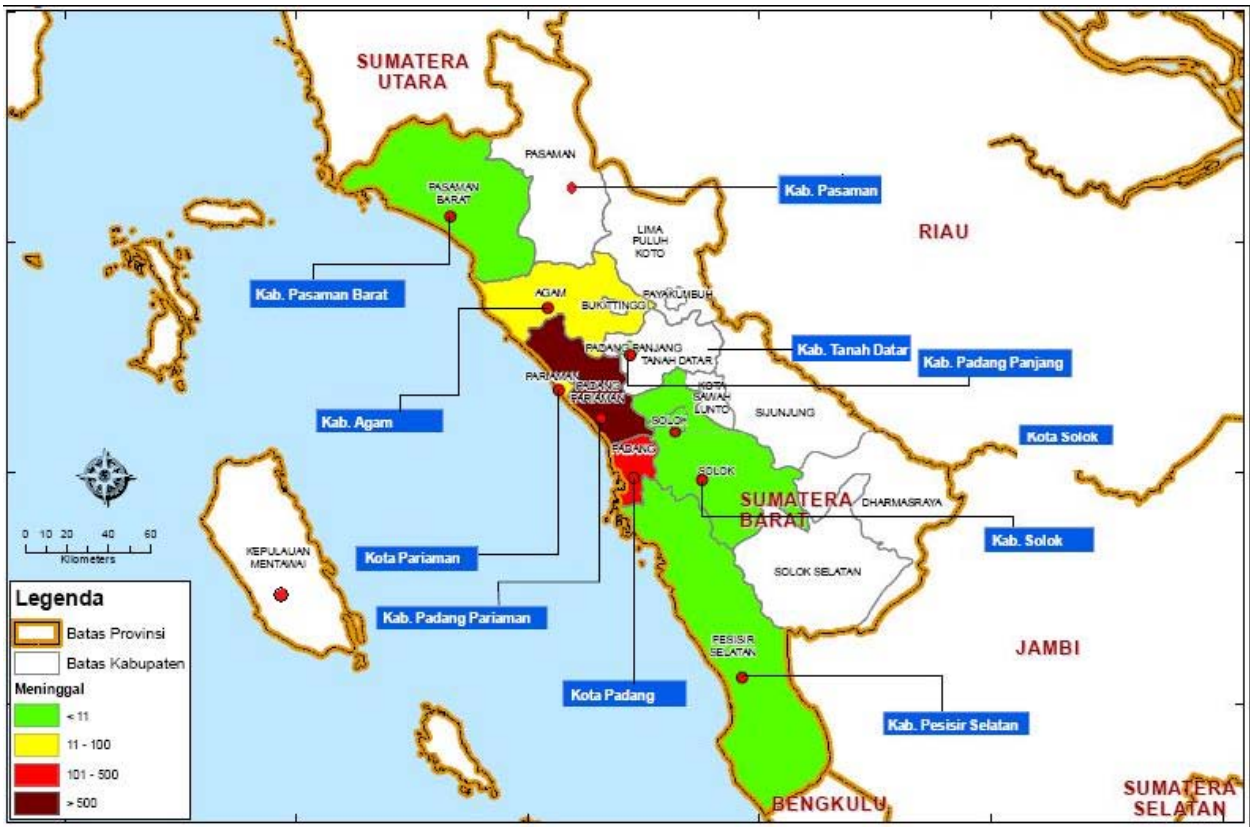
CHAPTER III

Damage Overview

III.1. Disaster and Damage Areas

Earthquake once again shocked West Sumatera on 30 September 2009. Based on information from BMKG (Meteorological, Climatology and Geophysical Agency of Indonesia), the main earthquake shocking the western part of Sumatera occurred on Wednesday evening, 30 September 2009, at 17:16:09 with a magnitude of 7.6 on the Richter Scale. The epicentre lied on coordinates 0.84 Southern Latitude – 99.65 Eastern Longitude, in a depth of 71 km under the sea, 57 km southwest of Pariaman, West Sumatera. 22 minutes later at 17:38:52 an aftershock occurred with a magnitude of 6.2 on the Richter Scale. The epicentre lied on coordinates 0.72 Southern Latitude – 99.94 Eastern Latitude, in a depth of 110 km under the sea, 22 km southwest of Pariaman, West Sumatera.

Figure III.1.
Map of Disaster Affected areas



Source: National Agency for Disaster Management

The earthquake has caused death as well as injuries in 12 districts/municipalities consisting of: Padang City, Padang Pariaman District, Mentawai District, Agam District, Solok District, Pasaman District, West Pasaman District and Pesisir Selatan District. A total of 1.117 people were killed, 1.214 severely injured, 1.688 sustaining minor injuries, 2 missing and 410 evacuated.

Table III.1
Victims Data

No	Location	Death	Injured		Missing	IDP
			Severe	Minor		
1	Padang City	313	431	771	2	
2	Pariaman City	32	148	278	-	
3	Solok City	3	-	-	-	
4	Padang Panjang City	-	6	14	-	
5	Tanah Datar District	-	-	-	-	
6	Padang Pariaman District	675	527	528	-	
7	Mentawai Archipelago District	-	-	-	-	
8	Agam District	80	90	47	-	
9	Solok District	-	-	5	-	
10	Pasaman District	-	-	-	-	
11	West Pasaman District	5	5	25	-	410
12	South Pesisir District	9	7	20	-	
Total		**1.117**	**1.214**	**1.688**	**2**	**410**

Source: Operation Command Centre of National Agency for Disaster Management, 18 October 2009

III.2 Response to Disaster

III.2.1 Government Response

In response to the earthquake occurring on 30 December 2009, emergency response was enforced since the occurrence of the disaster up to 30 December 2009. The first effort to be undertaken in accordance with the instruction of the President of the Republic of Indonesia was

to rescue victims trapped in building debris and to evacuate killed victims continuously for 24 hours for over 7 days since the occurrence of the disaster. Subsequently, government's response in the effort for emergency response was coordinated by BNPB (National Agency for Disaster Management) consisting of:

1. A coordination meeting was conducted, lead by the Vice President along with 7 ministers with the following conclusion:
   a. Emergency response activities shall be performed for 2 months.
   b. Minister of People's Welfare along with 6 ministers departed to the location on 1 October 2009 with an assistance in the amount of Rp. 100 billion which utilisation was to be coordinated by BNPB.
   c. Ministry of Health dispatched a team of doctors from North Sumatera.
   d. SAR Team was sent to support the evacuation and victims rescue process.
   e. Mobilisation of the Indonesian Navy ship to transport heavy equipment to be used during the evacuation process.
   f. Deployment of 2 Hercules to transport humanitarian aid.
   g. Distribution of 20.000 tents and 10.000 blankets by BNPB.
   h. Part of the assistance for the disaster victims were sent by means of land transportation.
   i. POLRI (Indonesian Police) headquarters deployed 339 personnel to support the evacuation process.
   j. Restoration of electricity distribution network, providing partial electricity supply to Padang City. The total electricity supply was planned to be restored in one week's time.

2. BNPB sent a Rapid Reaction Team and provided Rp. 5 billion to the Local Government, and a Rp. 100 billion on call fund for the management of the emergency response phase. BNPB also provided 20 platoon tents, 30 family tents, 1.000 roll tents, 10 gensets, 4.600 mosquito nets, 5.000 blankets, 5.000 mats, 100 packs Kids Ware, 100 packs kitchen equipment and 100 packs clothings.

3. Ministry of Health also sent assistance in the form of :

   a. Rp. 200 million operational cost, 1.5 tonnes medicines, 200 body bags, 5 tonnes baby food and 196 personnel comprising 3 RHA personnel, 75 medics, 60 paramedics, 5 health personnel and 53 other personnel.
   b. West Sumatera Sub-regional Crisis Management Centre (PPK) established a field hospital.

c. North Sumatera Regional Crisis Management Centre sent 1 pack medicine, 100 body bags, 30 baby food, 10 boxes of masks, 3 oxygen tanks, 10 banners utilising 3 ambulances and1 operational car.
d. South Sumatera Regional Crisis Management Centre sent medicines, 60 boxes of baby food, 20 body bags, utilising 1 ambulance, 1 clinic car and 2 operational cars.
e. Bengkulu Province Health Agency provided medicines utilising an ambulance.

4. Ministry of Social Affairs sent 3 tonnes of food materials.

5. SOEs and the private sector were particularly involved in providing transportation to channel assistance and logistics.

6. The President of the Republic of Indonesia accompanied by Minister of People's Welfare, Minister of State Secretariat, Minister of Home Affairs, Minister of Transportation, Minister of Public Works, Chief of POLRI, Commander in Chief of the TNI (Indonesian Armed Forces) met with Governor of West Sumatera Province and his lines of command, on Friday, 2 October 2009, and provided directions to continue victims rescue which include the rescue of victims trapped under debris, care for injured and sick victims, evacuation of dead bodies, as well as burial of killed victims. Disabled utilities such as electricity (PLN-State Electricity Company), fuel (Pertamina) and clean water.

7. Ministry of Health also sent 3000 medics and 766 medical specialist along with 3 tonnes of medicines.

8. Ministry of Energy and Mineral Resources dispatched a rescue team to Padang Pariaman.

9. Ministry of Finance will issue Regulation of Minister of Finance to regulate foreign assistance for the emergency response phase, both in terms of funding as well as goods, which will be regulated in field of taxation and customs.

10. Ministry of Finance opened 4 (four) accounts to accommodate donations for the West Sumatera natural disaster in 3 types of foreign currencies (US Dollar, Euro and Yen), which will subsequently be converted into Rupiah.

11. Directorate General of Customs and Excise issued a Circular concerning guidelines for the import of goods/equipment to assist in the natural disaster, which will be enforced at all relevant Customs offices in the disaster areas. Personnel at Minangkabau International Airport have been increased, especially to facilitate the import of disaster relief goods/equipment.

12. Ministry of Foreign Affairs issued 60 flight clearance for the entry of foreign assistance aimed for post-earthquake management in West Sumatera.

13. Ministry of Public Works delivered the following assistance:

    a. Undertaken efforts to restore clean water services in Padang City and Padang Pariaman District by providing 5 water tank trucks, 6 mobile water treatment installations, 30 public hydrants, 600 jerry cans, 5 alkon pumps, 124 emergency toilets, 200 emergency shelter tents, 10 hand pumps, 100 m spiral pipe, 4 emergency reservoirs.
    b. 3 mobile toilets, 40 public hydrants and 3 gensets will be delivered.

14. Ministry of Home Affairs

    a. A circular was sent to Governors regarding earthquake management support for West Sumatera.
    b. Provinces which provided assistance among others were Riau, Bengkulu, Yogyakarta Special Region, Central Java and East Java.

15. Ministry of Foreign Affairs

    a. Delivered a team to assist with permit/clearance for international assistance.
    b. Immigration, customs and quarantine.
    c. Protocol assistance.
    d. Assistance for foreign media accreditation.
    e. Liaison between foreign representatives and BNPB.

16. Ministry of Communications and Information

    Facilitated a Media Centre of the Integrated Command Post for the management of West Sumatera earthquake to serve the public, journalists and volunteers with the following facilities:

    a. Wireless internet
    b. Fixed Phone
    c. Polycom Conference Phone
    d. Hot Spot Internet facility in Pariaman

17. Energy and Mineral Resources Sector

Deployed an Emergency Response Team including doctors, paramedics, rescuers and medicines at several locations as follows:

a. Hotel Ambacang: PT. BA Ombilin, PT. BA Tanjung Enim, PT. AIC, PT. KPC, PT. Newmont Nusa Tenggara and PT. Freeport.
b. Pariaman: Geological Agency, Indominco, Vico, Central PLN (State Electricity Company) and Paiton.
c. Koto Tengah: PT Pertamina
d. Tandikat (landslides): PT. Berau Coal and PT. Pama Persada.

Coordinated and performed immediate repair on utilities with the following results:

a. Electricity restoration in Padang City, 257 transformers out of the existing 425 transformers (81%) were operational.
b. Electricity restoration in Pariaman, 88 transformers out of the existing 261 transformers (34%) were operational. Restored areas: Sunur and Pariaman City.

c. Undertaken effort for the consignment of fuel supply from the vicinity of West Sumatera including Sibolga, Dumai and Pekanbaru, an estimate of 20 gas stations in Padang City and 88 gas stations throughout West Sumatera were operational.

d. Monitored the development of aftershocks and the impact created.

e. Channelled assistance in the form of nine basic necessities, clothings, ambulance and medicines, heavy equipment, tents, gensets, transformers, network, tower, GI and rescue car.

18. TNI provided the following assistance:

a. Deployed 1.200 Army personnel, 300 Navy personnel and 100 Air Force personnel.
b. Assisted the distribution of relief utilising Hercules, Indonesian Navy Vessels - KRI Teluk Cirebon, and KRI Gilimanuk 531.
c. KRI Dr. Suharso Floating Hospital.
d. Channelled 4 packages of multipurpose tents, 6 VIP tents, 40 platoon tents, 25 folding beds, 40 portable stoves and 40 packs of paraffin.

19. POLRI provided the following assistance:

a. Deployed 1.200 personnel to maintain security, SAR, distributions of aids, health service and other emergency tasks.
b. Assisted distributions by deploying 3 Foker F-50 and 5 Helicopters.
c. Assisted communications by activating teleconference equipment linking BNPB, POLRI Headquarters, Integrated Command Post, Governor's Residence and West Sumatera Police Department.

20. The National Safe and Rescue Agency in Medan deployed personnel and 2 helicopters to provide logistical assistance in Pariaman District and assist evacuations.

21. PMI (Indonesian Red Cross) provided the following assistance:

    a. Set up a command post in South Pariaman, Padang Padang Panjang and Padang Pariaman.
    b. Provided 5 mobile clinics in 21 villages in South Pariaman.
    c. Treatment and primary care for 600 patients in South Pariaman.

22. Directorate General of Customs and Excise issued a circular (technical guidelines) on guidelines for import procedure for goods/equipment for natural disaster assistance. The circular was an extension of the same letter for post-disaster management in West Java Province.

23. For customs service at Minangkabau International Airport, Directorate General of Customs and Excise sent its staff to facilitate the smooth flow of goods/equipment to be used for post-disaster management.

III.2.2 International Response

The international community also showed great concerns for the West Sumatera earthquake and provided support in terms of funding as well as technical assistance and equipment, summed in the following table:

Table III.2.
Bilateral Emergency Response Assistance

No	Country	Amount/Type of Assistance	Detail
1	USA	Financial assistance in the amount of USD 300.000	US Government also prepared a financial assistance in the amount of USD 3 Million (USAID press

			release)
		Deployed Disaster Assistance Response Team (DART)	US Government also provided bed field hospital (UN-OCHA)
2	Saudi Arabia	Financial assistance in the amount of USD 50 million	Transferred to the account of Minister of Finance
3	Australia	A team comprising 48 personnel	According to the Australian Embassy press release, an Australian Defense Force Team (ADF) provided assistance for health and construction for 10-12 days, Rapid Response Team comprising 4 staff (estimate cost USD 25.000), SAR team 6-8 days (estimate cost USD 165.000)
		Emergency assistance tools	Family kits provided through Indonesian Red Cross(estimate cost $ 100.000), 50 family size tents, delivery of relief goods to Padang (estimate cost $ 150.000), airfreight to Indonesia for relief goods (estimate cost $ 165.000)
		Financial assistance in the amount of USD 2,8 million	• Health funds provided through Muhammadiyah and Nahdatul Ulama $ 250.000 • Funds up to $ 200.000 for transportation and logistics costs • Funds up to $ 100.000 for food and water purchase • Additional option of a $ 1 million dollar assistance being considered by

			Government of Indonesia
4	Austria	Offer of emergency assistance in the form of 250 family size tents	
5	Netherlands	Financial assistance in the amount of EUR 500.000	Channelled through Red Cross and is assessing to deliver subsequent assistance through UN etc.
		Emergency kits consisting of 1 month supply of medicines for the victims	
6	Belgium	Relief package from Medicine Sans Prontier Belgium	Relief package consisting of tents, blankets, medical supplies and medicines
7	Brazil	Financial assistance	Value is not yet known
8	People's Republic of China	Financial assistance in the amount of USD 550.000	According to the official statement of the Ambassador of the People's Republic of China to Indonesia, assistance was provided in the form of cash • USD 500.000 from Government of China • USD 50.000 from Red Cross of People's Republic of China
9	Denmark	Financial assistance in the amount of DKK 1.8 million	• Danish Foreign Ministry channelled to DKK 1,5 million to Red Cross • Danish Embassy channelled DKK 300.000
10	Hungary	Rescue Team deployment	• Hungarian Rescue Team comprising 12 personnel • 2 tracking dogs

			• SAR equipment
		Deployment of SAR and Medical teams (Hungarian Red Cross)	• 11 volunteers • 4 tracking dogs
11	United Kingdom	Financial assistance in the amount of GBP 500.000	Financial assistance channelled to Red Cross and Red Crescent
		Personnel assistance comprising 5 humanitarian volunteers, 60 personnel for search and rescue	
		386 shelter kits and 2 million water purification tablets	
12	Italy	Emergency assistance consisting of 10 gensets, blankets and tents	Additional assistance will be provided when Government of Indonesia provide information on its needs. The value is not yet calculated.
13	Japan	Emergency Rescue Team	According to official statement of JICA Indonesia Office, 65 personnel of an emergency rescue team arrived on 2 October 2009 comprising foreign ministry officials, personnel of Japanese Police Department, Japan Coast Guard and JICA. They stayed in Padang until 6 October 2009.
		Emergency medical team	Some 25 personnel medical team comprising doctors, nurses and others arrived on 2 October 2009 and stayed in Padang Pariaman for a week.
		Emergency equipment assistance in the amount of USD 270.000	Emergency equipment assistance consisting of 900 mattresses, 1500 blankets, 100 tents,80 gensets, 80 extension cords and 35 water

			purifiers.
14	German	Financial assistance	According to German Embassy press release, out of a total assistance of EUR 3 million, EUR 1.5 million had been channelled. USD 1,5 million was sourced from Federal Foreign Office and USD 1,5 million was sourced from Federal Ministry of Economic Cooperation and Development
		Personal urban search and rescue team	• German Aid Agency team previously involved in post-tsunami management in Aceh arrived on 1 October 2009 bringing clean water, 40 rescue specialists and SAR equipment for 10 Days. • The team was joined by 6 experts from THW with 24 members of ISAR team. Personnel assistance was also provided from Malteser Hilfsdienst, Carits, HELP, Humedica, Welthungerlife, ABS, Johanniter, Aktion Deiutchland Hilft, etc.
15	Canada	Emergency assistance in the amount of USD 45.000	The aid was channelled through IFRC (source: UN OCHA) rescue corp. from the UK
		Deployment of SAR team along with equipment (search camera, delsar acoustic/seismic search device)	2 SAR personnel joined the international rescue team
16	Korea	Emergency assistance in the	Assistance from Government of

		amount of USD 500.000	Korea consisting of tents, blankets and medicines were provided through KOICA
		SAR Team	• Deployment of 48 personnel • Funding assistance up to $ 100.000 to purchase food and water • Additional option of a $ 1 million dollar assistance being considered by Government of Indonesia
17	Malaysia	Deployment of Special Malaysia Disaster Assistance and Rescue team (SMART) and journalists	SMART comprised 20 personnel, 26 journalists from Malaysian news agencies, newspapers and televisions
		Emergency assistance	Emergency equipment consisting of tents, medical equipment and field hospital
18	Norway	Assistance package in the amount of USD 3,5 million	Channelled through UN system, Red Cross etc
19	France	A 75 personnel rescue squad, 2 experienced doctors and 6 tracking dogs	The team arrived in Padang on 4 October 2009. The second flight will transport 25 tonnes of relief aid. The value has not been assessed.
20	Qatar	SAR Team	20 SAR team personnel, 2 SAR vehicles and SAR equipment
		Emergency equipment assistance	A USD 3 million relief package consisting of tents, food and medicines
21	Russia	Personnel assistance	• 46 SAR team personnel and heavy equipment along with 6 tracking dogs, 1 jeep, 2

			trucks • Doctor+psychologist, along with Airmobile Field hospital • Heavy USAR team
22	New Zealand	Initial financial assistance in the amount of NZD 600.000	According to an official statement of the New Zealand Embassy, the financial assistance was channelled through IFRC to Indonesian Red Cross. Direct financial assistance was also channelled to SurfAID and/or Mercy Corps.
		Troppodoc	A volunteer organisation deploying Dr. Derek Norman Allen to assist the management of earthquake victims in Padang. The incumbent had considerable experience in Nias and claimed to have a helicopter which may be utilised for humanitarian activities
23	Singapore	Deployment of 42 personnel and a rescue team	1 SAR team and rescue equipment
		Emergency relief goods in the amount of USD 50.000	Emergency assistance consisting of tents, blankets, medicines and medical equipment (source: Singapore Foreign Ministry)
24	Slovakia	Deployment of SAR team	2 SAR teams, rescue dogs, and disinfecting and sterilisation operations
25	Spain	39 personnel	According to the official statement of the Spanish Embassy, personnel assistance will arrive in two flights
		Emergency assistance	The third flight carrying 10 tonnes

			of humanitarian aid was scheduled to Arrive in Padang on 7 October 2009 at 9 am. The humanitarian aid consisted of emergency tents, blankets, water and sanitation equipment worth EUR 173.964,35
26	Sweden	Financial assistance in the amount of SEK 6,5 million	Channelled through OCHA emergency fund
		Personnel assistance	A Swedish institution sent 10-15 IT experts. The assistance was worth SEK 3,6 million. The flight was also joined by personnel from Estonia and Denmark equipped with emergency equipment.
27	Swiss	7 day personnel assistance	According to the official statement of the Swiss Foreign Ministry, 120 personnel comprising search unit, rescue unit, medical unit (13 doctors and paramedics), support staff and 18 tracking dogs arrived on 2 October 2009
			3 tonnes of team equipment, 16 tonnes of technical equipment and 8 tonnes of emergency rescue goods
28	Thailand	Emergency assistance in the amount of USD 170.000	30 gensets, medicines and food
29	Taiwan	Financial assistance worth USD 150.000	Aid channelled through Taipei Economic and Trade Office
30	Turkey	SAR deployment (GEA search and rescue ecology group)	9 volunteers
31	European Union	Financial Assistance	Financial assistance worth EUR 3 million
		Rapid Response Team assistance	ECHO Personnel

		Emergency equipment assistance	As an implementation of its civil protection mechanism, the EU provided the following assistance: • 2 communications equipment and IT module kit + expert staff • 10 SOCC module • 1 tight basw camp module • 200 tents and 1 advance medical post module • 1 advance medical post module for operation including 12 medical staff comprising: 4 surgeons, 1 anaesthesiologist, 1 gynaecologist and 6 nurses.
		Electrical generator	Type and capacity in accordance with the needs
		First relief team	56 medical team and research team
32	UAE	First relief team	56 medical team and search team

Source: Directorate of Bilateral Overseas Funding, Bappenas (National Development Planning Agency), 8 October 2009

Table III.3.
Multilateral Emergency Relief

No	Agency	Amount/Type of Assistance	Detail
1	UN-OCHA	Financial assistance in the amount of USD 20.000-50.000	Government of Indonesia is proposing an additional assistance in the amount of EUR 170.000
		10 personnel from UNICEF, UNDP,	

		WFP and WHO	
	UNICEF	Emergency assistance were channelled for 50.000 households, including water pumps, water storage equipment, 40.00 jerry cans, 40.000 hygiene kits, 250 school tents, and recreational kits for school children	
	UNDP	Financial assistance, initial estimation in the amount of USD 100.000 Emergency assistance consisting of portable generator, food, handheld radio, satellite phone Personnel assistance comprising 1 international technical assistance and 7 National Technical Advisors	
	WFP	Prepared 70 metric tonnes energy biscuits and heavy equipment	
2	ADB	Asia Pacific Disaster response Fund in the amount of USD 3 million	In the process of being approved by president of ADB, possibly next week.
3	World Bank	Financial assistance in the amount of USD 250.000	

Source: Directorate of Bilateral Overseas Funding, Bappenas (National Development Planning Agency), 8 October 2009

III.3 Post-disaster Needs Assessment

Needs assessment is needed to serve as a base for the planning of post-disaster area recovery. 2 important aspects of the needs assessment are the damage and loss aspect as well as the social and humanitarian recovery aspect.

III.3.1 Damage and Loss Assessment

In order to assess post-earthquake damage and loss in West Java and Central Java, a joint team consisting of BAPPENAS, BNPB, the local government as well as international partners performed a damage and loss assessment utilising a methodology developed by the UN, namely Economic Commission for Latin America and Caribbean (ECLAC). ECLAC methodology was initially used in the early 70's and has been modified and developed for over 3 decades in the context of disasters throughout the world.

This methodology produced an initial assessment of the impact of the damage in terms of physical assets to be repaired/replaced - including other losses caused by the disaster - until the assets are repaired or rebuilt.

The assessment analysed 3 main aspects:

1. Damage (Direct Impact) related to assets, supply/livestocks and other properties (land, buildings/houses) assessed in terms of a unit price matching the appropriate replacement value (not reconstruction). Unit prices in accordance with applicable regulations were used for the damage estimation.

2. Losses (indirect impact) on aspects which will have an effect, such as decreasing income/revenue and increasing costs, up to the time the assets are recovered. The loss was measured according to the present value. The time period was not easily defined (difficult/most critical). The loss will become increasingly larger in the event that the time consumed is more than expected, such as in the case of Aceh.

3. Macro Economic effects (frequently termed secondary impact) including fiscal/monetary impact having implications on GDP. This analysis may also be applied at the local level.

III.3.2 Humanitarian Recovery Needs Assessment

Humanitarian Recovery Needs Assessment/HRNA was based on the assessment of individual and community perceptions in order to provide a better information for the recovery and reconstruction process. Unlike Damage and Loss Assessment/DaLA which was based on the collection of quantitative data on "what" has occurred based on secondary data from the government verified by field visits, HRNA was based on field assessment of qualitative primary data on individual and community perceptions on "how" to perform and what should be performed based on the perception of the community on the implications of the damage and the post-disaster needs.

As a whole, HRNA and DaLA established Post-disaster Needs Assessment/PDNA in which both were used together to identify the cause of the disaster and how to prevent its reoccurrence, thereby reducing future disaster risks during the recovery process of the disaster affected community.

HRNA methodology was designed to obtain direct inputs from the disaster affected community concerning their views of the recovery needs in terms of basic needs and access to basic services.

III.4 Damage and Loss Estimation

Damage and loss assessment was initiated with the collection of damage data. It is performed immediately after the disaster followed by a data verification process in order to ensure the accuracy of the data. Damage and loss assessment was coordinated by BNPB supported by Bappenas as well as donor and international institutions.

The damage and loss assessment estimated a total damage and loss sustained by 12 Districts/Municipalities in West Sumatera to reach Rp. 19,2 trillion, with a composition of Rp. 17,2 trillion for damage and Rp. 3,5 trillion for losses. The damage and loss were categorised into 5 assessment sectors as follows:

Table III.4.
Post-earthquake Damage and Loss Recapitulation for West Sumatera Province

	Impact of Disaster			Property	
	Damage	Loss	Total	Private	Government
Housing	**13.450**	**1.960**	**15.410**	**15.410**	**-**
Infrastructure	**930,1**	**32,8**	**963**	**483,2**	**479,8**
Social	**1454,1**	**72,3**	**1526,3**	**633,9**	**892,2**
Productive Sector	**773,8**	**1519**	**2292,7**	**1942,9**	**349,7**
Cross sector	**660,6**	**14**	**674,6**	**0**	**674,6**
Total	**17.268,60**	**3.598,10**	**20.866,60**	**18.470,00**	**2.396,30**
Total (USD)	**1,837.1**	**382.8**	**2,219.8**	**1,964.9**	**254.9**

Source: Damage and Loss Assessment, BNPB; 2009

III.4.1 Housing Sector

The most recent verification process of the housing sector damage was performed up to 26 October 2009. 240.833 houses were damaged consisting of 114.483 houses with severe to total damage; 67.182 houses with medium damage; and 68.913 houses with minor damage. The damage assessed was Rp. 15.9 trillion, the majority of which was building damage. Large number of houses were damaged by the earthquake because they did not employ earthquake resistant construction. This needs to be paid closer attention to considering the high potential of earthquake in West Sumatera Province.

Table III.5.
Distribution of the Housing Sector Damage

District/Municipality	Pre-disaster Condition		Severe Damage	Medium Damage	Light Damage
	Number of Houses	Number of Households			
Padang City	150.421	178.970	33.597	35.816	37.615
Pariaman City	15.154	17.124	6.514	3.960	2.931
Solok City	11.234	12.805	2	2	6
Padang Panjang City	9.177	10.941	17	164	413
Tanah Datar District	82.717	89.400	28	115	105
Padang Pariaman District	91.069	86.690	57.788	16.430	13.694
Mentawai Archipelago District	16.191	17.188	3	-	136
Agam District	97.907	112.029	11.796	3.797	4.353
Solok District	80.211	89.863	145	243	357
Pasaman District	53.925	59.454	197	13	931
West Pasaman District	75.580	78.236	3.240	3.046	2.862
South Pesisir District	102.903	112.387	1.156	3.596	5.510
Total	**786.489**	**865.087**	**114.483**	**67.182**	**68.913**

Source: Damage and Loss Assessment, BNPB; 2009

III.4.2 Infrastructure Sector

The infrastructure sector affected by the impact of the earthquake consisted of transportation sub-sector, communication sub-sector, energy sub-sector as well as water and sanitation sub-sectors. The total damage and loss to the infrastructure sector reached Rp. 963 billion.

Table III.6.
Damage and Loss Assessment for Infrastructure Sector

	Damage	Loss	Total	Private	Government
Infrastructure	**930,1**	**32,8**	**963**	**483,2**	**479,8**
Transportation and telecommunication	327,6	19,7	347,3	52,3	295
Roads and bridges	294	0	294	0	294
Telecommunication	33,6	19,7	53,3	52,3	1
Energy	46,3	6	52,3	0	52,3
Clean Water and Sanitation	556,2	7,1	563,4	430,9	132,5
Clean Water	232,3	7,1	239,5	107	132,5
Sanitation	323,9	0	323,9	323,9	0

Source: Damage and Loss Assessment, BNPB; 2009

The infrastructure damage caused by the earthquake cut off land transportation routes from and to several districts/municipalities in West Sumatera. The earthquake also ceased supply and distribution in the communication, energy as well as water and sanitation sub-sectors and caused a potential loss of revenue over a period of time due to halted production activities.

III.4.3 Social Sector

According to the assessment of the authorised agencies coordinated by BNPB, the damage and loss due to the earthquake was Rp. 1,5 trillion, consisting of Rp. 588,7 billion in the education sub-sector, Rp. 611,5 billion in the health sub-sector, Rp. 307,2 billion in the religion and culture sub-sector and Rp. 18,9 billion in the social sub-sector. Based on the distribution of

the damage and loss assessment, the education sub-sector was the most severely affected, followed by the health sub-sector. The infrastructure damage in the social sector caused educational and health services to cease.

Table III.7.
Damage and Loss Assessment for Social Sector

	Impact of Disaster			Property	
	Damage	**Loss**	**Total**	**Private**	**Government**
Social	**1.454,1**	**72,3**	**1.526,3**	**633,9**	**892,2**
Education	563,7	25	588,7	103,5	485,1
Health	569,1	42,4	611,5	223	388,4
Culture and Religion	304,2	3,1	307,2	300,5	6,7
Social Institution	17,1	1,8	18,9	6,9	12

Source: Damage and Loss Assessment, BNPB; 2009

III.4.4. Productive Sector

The assessed loss in the economic sector was higher than the damage. This was due to the halted economic activities in the disaster affected area. The trade sector was most severely affected by the impact of the earthquake, with Ro. 1,1 trillion in damage and loss due to the damage in trading facilities such as markets. The disabled trade facilities consequently stopped the people's economic activities and in turn affected the condition of the local economy.

Apart from the trade sub-sector, other sub-sectors which were affected by the impact of the earthquake and sustained relatively significant losses were agriculture, fishery, farming, financial and banking as well as tourism sub-sectors.

Table III.8.
Damage and Loss Assessment for Productive Sector

	Impact of Disaster			Property	
	Damage	**Loss**	**Total**	**Private**	**Government**
Productive Sector	**773,8**	**1519**	**2.292,7**	**1.942,9**	**349,7**
Agriculture	56,1	223	279,1	228,8228,8	50,3
Crops	0,6	172	172,6	172,6	0
Farming	5,2	2	7,2	4,4	2,8
Fishery	6,8	49	55,8	51,8	4
Irrigation	43,5	0	43,5	0	43,5
Trade	567,8	574,7	1.142,40	1.095,2	48,2
Industry	10,9	114,8	125,6	125,6	0
Business and Financial	68	230,2	298,3	64,5	233,8
Bank	63,6	152,2	215,9	61,1	154,8
Non-Banking	4,4	78	82,4	3,4	79
Tourism	71	376,3	447,3	429,8	17,4

Source: Damage and Loss Assessment, BNPB; 2009

III.4.5. Cross Sector

Cross-sectoral damage was dominated by the damage to the government office infrastructures which ranged from offices of central government agencies, provincial government office, up to sub-district and village government offices. The infrastructures were so severely damaged that additional efforts and funds for demolitions and rubble clearance would be needed during the rehabilitation and reconstruction phase.

Table III.9.
Damage and Loss Assessment for Cross Sector

	Impact of Disaster			Property	
	Damage	**Loss**	**Total**	**Private**	**Government**
Cross Sector	**660,6**	**14**	**674,6**	**0**	**674,6**
Government	660,5	13,9	674,6	0	674,4
Environment	0,1	0,1	0,2	0	0,2

Source: Damage and Loss Assessment, BNPB; 2009

III.4.6 Impact of Disaster

This part describes the impact of the West Sumatera earthquake on the livelihood of the community by analysing the impact on the national economy, local economy, people's economy, local government finance and the impact on employment as well as poverty and life of the community directly affected by the earthquake.

Economic Impact

In general, the economic condition of West Sumatera Province is not significantly affected by the earthquake. It is predicted that the economic growth will decrease by 1,2 % and incur an estimate of Rp. 1 trillion loss. Severe economic downturn is predicted to have an impact on most severely affected districts/municipalities. It is estimated that those areas will sustain a 3 % decrease in 2009, particularly in sectors sustaining direct impact from the earthquake. As a whole, West Sumatera Province contributes 1,4 % to the national GDP, mostly contributed by the transportation and communication sector (3,3 %) as well as the agriculture sector (2,6 %). As for the trade sector, the contribution of West Sumatera Province to the national trade (1,2 %) is relatively unaffected by the earthquake despite the fact that several companies sustained direct impact.

Table III.10.
Sectoral Contribution to National GDP

Sector	Rp (billion)	Contribution to Regional GDP %	Contribution to National GDP %
Agriculture	18.319	25.7	2.6
Mining and Excavation	2.351	3.3	0.4
Manufacturing	8.535	12.0	0.6
Electricity, Gas & Water Supply	832	1.2	2
Construction	3.884	5.5	0.9
Trade, Restaurant and Hotel	12.464	17.5	1.8
Transportation and Communication	10.435	14.6	3.3
Finance and Banking	3.398	4.8	0.9
Services	11.014	15.5	2.3
Total GDP	**71.233**	**100.0**	**1.4**

Source: Damage and Loss Assessment Report; 2009

Trade, hotel and restaurant sectors are most severely affected by the earthquake. These sectors are projected to sustain a 4,3 % loss excluding building damages. The finance and banking sector is estimated to experience 1.7 % increase in operational cost. Although impact on industry is predicted to be minor and that it will immediately recover, a 0,5 % decrease is predicted for the following year, with several small industries sustaining losses over a an extended period of time. The agriculture sector contributes 25 % out of the revenue of West Sumatera Province. It is estimated that the impact of the disaster on this sector is extremely minor. Majority of losses in this sector were due to disrupted agricultural production caused by damaged irrigation system. It is projected that this sector will experience a 1,2 % decrease.

Increase in activities in the construction sector for the purpose of repairing public housing and government infrastructures during the rehabilitation and reconstruction phase is expected to drive economic improvement. However, this depends on the availability of fundings and resources. The construction sector is estimated to experience a 5 % growth in 2010 and 2011.

Table III.11.
Distribution of Assessed Loss

Sector	Loss	Value added ratio based on sector revenue	Sector loss		Employment	
	billion Rp	ratio	billion Rp	% 2009 GDP projection	2008	variation
Agriculture	223,0		194,0	**-1,00%**	866.247	-8.736
Agricultural Land	172,0	0.9	154,8			
Farming	2,0	0.7	1,5			
Fishery	49,0	0.8	37,7			
Industry	114,8	0.4	47,0	**-0,50%**	97.715	-508
Utility	13,1		7,6	**-0,80%**	9.129	-75
Electricity	6,0	0.6	3,3			
Clean water and sanitation	7,1	0.6	4,3			
Trade, hotel and restaurant	951,0		590,4	**-4,30%**	371.044	-15.978
Trade	574,7	0.7	402,3			

Tourism	376,3	0.5	188,1			
Business and Finance	237,6	0.3	66,4	**-1,70%**	20.187	-352
Social Services	72,2	0.4	30,0	**-0.20%**	345.542	-812
Direct Impact	**1.625,5**		**941,3**	**-1,20%**	**1.959.928**	**-26.462**
Remarks:						
Increase in Construction Activities	623,1	0,1	362,3	**8.3%**	71,32	14,264
Impact of Construction	**1997,6**		**579**	**-0.7%**		**-12,198**

Source: Damage and Loss Assessment Report; 2009

The local government will be affected by the loss of revenue from the company sector and the increase in cost for the reconstruction. In 2007, majority of the revenue of the West Sumatera local government originated domestically, 43% consisted of tax revenue from properties and the formal sector. The local government tax revenue is predicted to decrease by 4% due to the decreasing growth in the hotel and property business sectors. High additional cost for reconstruction will also impact the local government financial position. However, it will be offset by additional funds for rehabilitation and reconstruction from the central government.

Impact on Livelihood and Employment

The decrease in economic activities due to the earthquake is estimated to cause 27.000 people to lose their jobs. Trade, hotel, and restaurant sectors are estimated to sustain the most severe impact with an estimate of 16.000 job losses. The agriculture sector which absorbs approximately 44 % of the labour force in West Sumatera Province is predicted to lose 1 % employment due to the damage to agricultural lands. Despite disruptions in productions, large scale industries such as cement manufacturing and palm oil processing were not significantly affected and has resumed normal operation. Out of over 100.000 MSMEs in West Sumatera Province, only a small portion sustained damages (production equipment and work place) and it is predicted that their recovery will take an extended period of time.

The initial phases of the rehabilitation activities are expected to drive the creation of employment. The repair and reconstruction of infrastructures, trades, hotels and restaurants are expected to be completed in 2 years. The increasing activities in the housing and infrastructure sectors during the rehabilitation and reconstruction period will also create employment in the construction sector and it is estimated to create 10.000-15.000 new jobs.

Impact on Social and Community Life

Impact on poverty. The decreasing employment opportunities and loss of jobs are predicted to increase poverty. Other factor affecting the condition is the increase in prices of basic necessities due to inflation. Approximately 10 % households in West Sumatera Province live under the poverty line, while those living above the poverty line are extremely prone to the impact of the earthquake. The loss of jobs and income are estimated to increase the poverty figure by 1,5 % to 11 % in 2010. Rehabiltation and reconstruction efforts as well as livelihood recovery assistance are expected to be implemented as soon as possible, thereby suppressing the rate of poverty rise by 0,5 %. Apart from that, the main priority for the recovery is aimed at the poor and vulnerable communities at worst affected areas.

III.5. Human Recovery Needs Assessment

Human Recovery Needs Assessment was performed during the emergency response phase to identify priorities of the most urgent needs of the disaster victims. It was coordinated by BNPB and supported by international donor institutions. The basis of its implementation were data and information related to vulnerability and threat during pre-disaster condition as well as demographic conditions prior to the disaster.

Initial HRNA indicated the potential for the increase in the number of poor population as the result of the damage to houses and the accompanying social problems, particularly access to basic needs and services.

Table III.12.
Pre-Disaster Demographic Condition and Post-earthquake Housing Damage in West Sumatera Province

(table in separate file)

General description on the potential of poverty rise due to earthquake in West Sumatera Province which is illustrated in table III.12 compares the demographic condition prior to the disaster and the number of damage in the housing sector. The result shown in the table may be described as follows:

1. The potential for the poverty rise occurs in the worst affected districts/municipalities. This is based on the comparison of the percentage of the number of non-permanent houses, the percentage of poor population prior to the disaster and the percentage of the number of houses severely damaged by the earthquake. 4 districts/municipalities have the potential of poverty rise due to the large number of houses that were damaged. Those areas are Padang Pariaman District, Pariaman City, Padang City and Agam District.

2. The potential for the rise in the number of the poor population may be caused by the loss of properties due to damaged houses, as well as because the access of the community to basic needs and services, such as access for food, decent housing, clean water and other needs were cut off .

   The potential increase in poverty is further reinforced by the results of the recovery needs assessment which describes that the fundamental issues most widely felt due to the earthquake were the concern for the loss/decreasing income, physical threats, lost/damaged houses, fulfilment of food, clean water and health issues.

   The results of HRNA based on the perception of the people on the fulfilment of basic needs and access to basic services are briefly described as follows:

   The characteristics of the earthquake affecting this area are similar to the characteristics of disasters in other parts of Indonesia and consist of the following three main characteristics:

1. **Large number of houses were destroyed in the village.** This occurred because methods for earthquake resistant construction were not widely known by local contractors or families who built their own houses.

2. **Large number of schools that were totally destroyed or severely damaged.** This is **a**nother characteristic that occurs throughout Indonesia.

3. **High number of village access roads were cut off by landslides.** This is generally caused by unstable land condition which is not taken into account during the planning, design and construction process of access roads to villages.

The West Sumatera Earthquake has significant impact on various aspects of basic human needs at disaster affected areas. In general, those aspects may be described as follows:

1. Access to Food - Access of the disaster victims to food were disrupted. However, it was not to the point where they would consider themselves to be in the imminent risk of starvation. Early recovery support for food access was extremely needed due to the disruption to the community eating routines, exacerbated by the decrease of their level of income.

2. Social Solidarity – Social tie in the community needs to be accounted for, especially concerning the potential for conflict caused by disputes over water resources following the earthquake.

3. Access to Clean Water, Sanitation and Hygiene – Depending on how soon the local government is able to restore basic services which include the supply of clean water, urban households need to be supported to ensure continuous access to clean water. Limited access and availability of sanitation facilities also need to be addressed.

4. Access to Housing – Temporary housing/shelter is urgently needed to enable the disaster affected households to perform their productive functions.

5. Access to Livelihood – Although of varying degrees, two third of the households surveyed stated that their livelihoods were disrupted by the earthquake. Early recover schemes need to support the community livelihood by providing grants, soft loans, technical/marketing support or retraining, particularly at the worst affected areas such as Padang Pariaman District and Agam District.

6. Access to Education – The existing temporary school facilities do not meet safety standards to ensure continuity of learning activities. This is similar to the characteristics of the damage caused by earthquake throughout other areas in Indonesia, whereby a third up to half of all the schools were completely destroyed or rendered unusable. Therefore, temporary schools fulfilling safety requirements are needed to ensure the continuity of the learning process.

7. Safe and Sustainable Environment - Majority of the respondents stated that the greatest environmental hazard were due to building rubbles. Therefore, support is needed to clear the rubbles caused by the earthquake. On the other hand, the earthquake also caused the increasing use of woods as a source of fuel. This needs to be anticipated at an early stage to prevent further damage to the surrounding environment.

8. Access to Community Facilities /Infrastructures – A third of the households surveyed stated that religious facilities such as village mosques were the centres of community activities which needed immediate repair and reconstruction. Apart from that, three types of infrastructures which also require immediate repair/replacement or reconstruction were water reservoir along with its distribution network (including irrigation), village foot paths and bridges as well as electricity generating facility.

9. Access to Public Services – The people generally desires: facilitation from the local government; clear information on the types of assistance available, open access to information on disaster management and recovery; opportunities to participate in the activity planning process of the recovery.

Table III.12.
Comparison between Pre-Disaster Demographic Condition and Post-earthquake Housing Damage in West Sumatera Province

No	District/Municipality	Number of Population	Number of Households	Number of Very Poor + Poor Population	% Number of Very Poor + Poor Population/Number of Population	Number of Very Poor + Poor Families	% Number of Very Poor + Poor Families/Number of Households	Population density (person/square km)	Number of houses	Number of non-permament houses	%Number of Non-permanent houses/number of houses	Number of severely damaged houses	%Number of severely damaged houses/number of houses
1	West Pasaman	347.051	78.236	65.445	18,9%	13.814	17,7%	90	75.580	17.814	23,6%	3.240	4,3%
2	Agam	455.591	112.029	52.557	11,5%	10.578	9,4%	204	97.907	16.294	16,6%	11.796	12,0%
3	Padang Pariaman	388.098	86.690	48.837	12,6%	10.503	12,1%	249	91.069	9.025	9,9%	57.931	63,6%
4	Tanah Datar	344.143	89.400	31.153	9,1%	6.854	7,7	256	82.717	13.064	15,8%	28	0,0%
5	South Pesisir	458.515	112.387	81.972	17,9%	18.698	16,6%	77	102.903	23.600	22,9%	1.156	1,1%
6	Pasaman	245.862	59.454	61.806	25,1%	13.135	22,1%	59	53.925	6.334	11,7%	197	0,4%
7	Mentawai Archipelago	75.379	17.188	57.838	76,7%	13.099	76,2%	12	16.191	11.343	70,1%	3	0,0%
8	Solok	358.602	89.863	58.878	16,4%	13.100	14,6%	106	80.211	18.914	23,6%	145	0,2%
9	Padang City	777.893	178.970	79.116	10,2%	14.981	8,4%	1.437	150.421	15.383	10,2%	33.597	22,3%
10	Padang Panjang City	47.824	10.941	2.108	4,4%	488	4,5%	4.470	9.177	1.435	15,6%	17	0,2%
11	Solok City	53.563	12.805	4.231	7,9%	902	7,0%	825	11.234	656	5,8%	2	0,0%
12	Pariaman City	78.920	17.124	5.595	7,1%	1.105	6,5%	730	15.154	615	4,1%	6.685	44,1%
Total		**3.631.441**	**865.087**	**549.536**	**15,1%**	**117.257**	**13,6%**	**8.516**	**786.489**	**134.477**	**17,1%**	**114.797**	**14,6%**

Source: Podes (Village Potential Census) Data; Year 2008 and Result of Housing Damage Verification, BNPB; Year 2009

CHAPTER IV
RISK REDUCTION EFFORT IN POST-DISASTER CONTEXT

IV.1. POTENTIAL OF NATURAL DISASTERS IN WEST SUMATERA PROVINCE

IV.1.1. Types of Hazard

General Provisions of Law 24/2007 on Disaster Management categorises disaster into Natural Disaster, Non-natural Disaster and Social Disaster. Natural Disaster refers to a disaster caused by one or a series of natural phenomenon, such as earthquakes, tsunamis, volcanic eruptions, floods, droughts, typhoons and landslides.

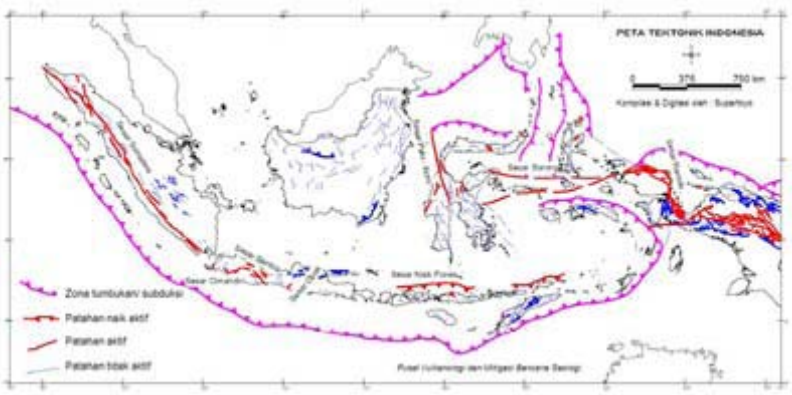
West Sumatera Province is a province in Indonesia having a relatively high and variant disaster potential. A series of natural disasters described in the 2008-2012 Plan for Disaster Management of West Sumatera Province are as follows:

Earthquakes

Earthquakes are due to activities of the subduction zone in the sea as well as active plates onland and in the sea. Areas along Bukit Barisan on Sumatera Island lies on active plates, whereas the western coast of Sumatera is closely located to a subduction zone. Standard of Earthquake Planning for Building Structures (SNI-1726, 2002) indicates that West Sumatera Province is one of the provinces having the highest peak ground acceleration (PGA) in Indonesia.

This is shown by a series of earthquakes occurring in West Sumatera areas, such as on 28 June 1926 in Padang Panjang measuring 7 on the Richter Scale, causing 354 deaths and damaged over 3000 houses. Subsequent earthquakes also occurred in Bengkulu and West Sumatera in April 2005, March 2007 and September 2007 measuring 7,9 on the Richter Scale, causing 25 deaths and destroyed 88.375 houses.

Figure IV.1.
Techtonics and Distribution of Active Plates in Indonesia



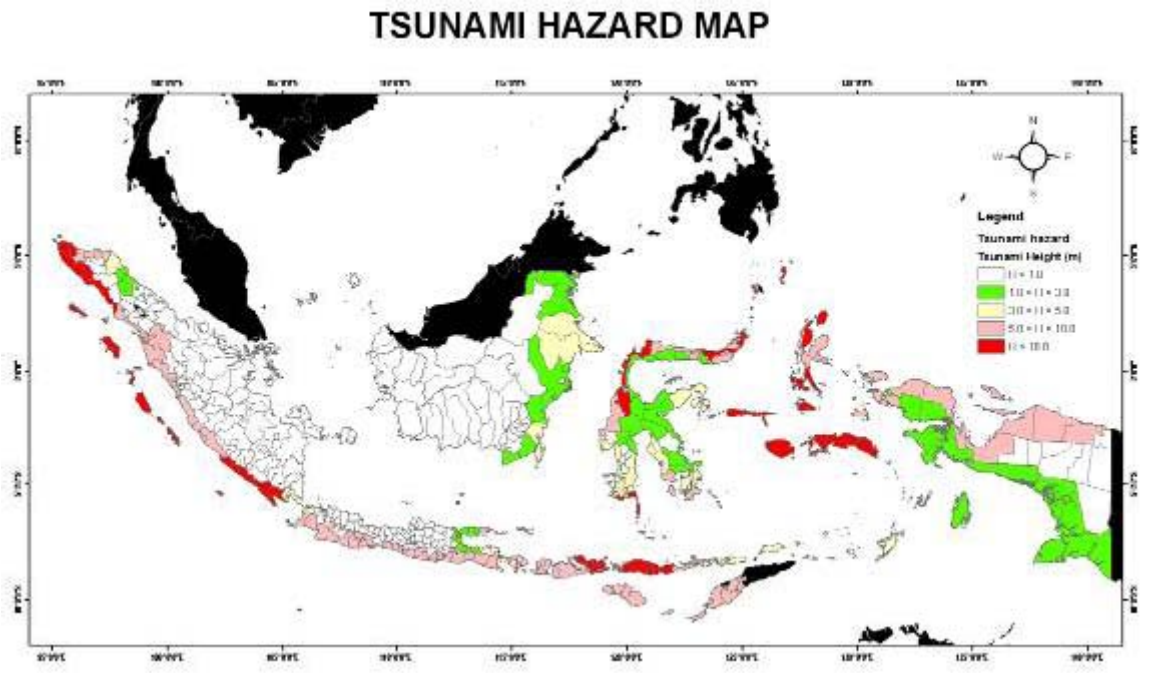
Source: (Centre for Vulcanology and Mitigation of Geological Disasters/PVMBG, 2008).

Tsunami

Tsunami refers to a long wave occurring due to a shift in the sea bottom or a sudden and impulsive displacement of a body of water due to an earthquake, undersea volcanic eruption, undersea landslide, or avalanche and even outer space objects falling on to the sea surface. Damage and destruction due to the tsunami are direct effects of three factors: flood, impact of the wave on structures, and erosion. Strong currents caused by the tsunami erodes the foundations of sea bridges or walls and cause them to fall.

Studies conducted by geologist identified an epicentre at the Sumatera subduction zone located near Mentawai Archipelago on the west coast of Sumatera Island which has the potential to flood the coastal region of West Sumatera Province. The document of the Dutch Colonial Government indicated the occurrence of tsunamis in West Sumatera on 10 February 1797 and 24 November 1833, with an approximate height between 3-4 metres and approximate length of 1 km.

Figure IV.2.
Index Map of Tsunami Hazard



Source: PMB-ITB (Centre for Disaster Mitigation, Bandung Institute of Technology), 2009

Volcanoes

West Sumatera Province has the potential for volcanic eruptions from Mt. Merapi, Mt. Tandikat, Mt. Talang and Mt. Kerinci. In 2007, Mt. Talang in Solok District showed an increase in volcanic activity through its lava burst, while Mt. Merapi continues to release smoke in the recent years.

Floods

This province is passed by major rivers which flow from the mountainous area in the east to the coastal area in the western region. The activities of the traditional people are centred around the sides of the rivers such as in Solok, Pasaman, Damasraya and Agam Districts. The lack of awareness of the community concerning flood prevention effort increases the potential of floods in this region.

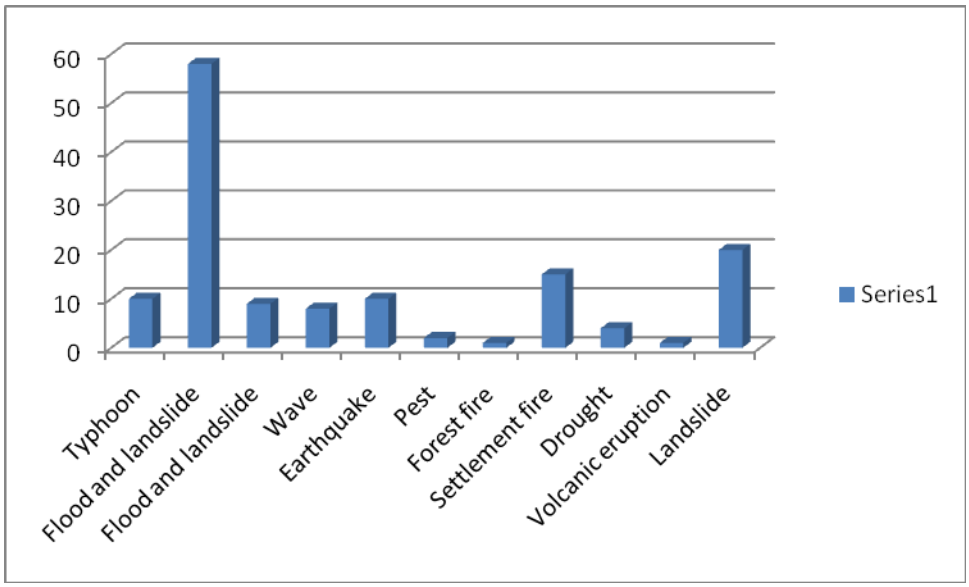
Landslides

Landslide is one of the most common type of natural disaster in Indonesia. Landslide occurring on 4 May 1987 in Padang Panjang killed 143 people, damaged 49 houses and buried 1 school building.

Abrasion

The fact that the geographic position of West Sumatera Province directly borders the Indian Ocean in the west direction creates the potential for abrasion with the possibility of altering the coast line. Buildings along the coast are frequently destroyed by abrasions.

Figure IV.3.
Number of Natural Disasters in West Sumatera Province 2002-2009



Source: DIBI (Indonesian Disaster Information Data), BNPB 2009

4.1.2. VULNERABILITY

The term 'disaster prone' instead of 'vulnerability' is used in Chapter I, General Provision, Article 1 of Law 24/2007. Disaster prone refers to geological, hydrological-biological, climotological, geographical, social, cultural, political, economic, and technological conditions of an area over a certain period of time which reduce the capacity to prevent, suppress, achieve preparednes and reduce the capacity to address the impact of certain hazards.

In general, vulnerability is categorised into physical and non-physical vulnerabilities. Non-physical vulnerability relates to social and economic conditions of the population, such as the

number of population, population distribution, level of poverty/number of poor population, demographic structure (level of education, age structure) etc. The Disaster Management Plan of west Sumatera Province identified both types of vulnerabilities related to each disaster illustrated in the table below.

Table IV.1.
Vulnerability of West Sumatera Province according to the Type of Disaster

Threat	Physical Vulnerability	Non-physical Vulnerability
Earthquake	• Guidelines for earthquake resistant construction is unavailable • Earthquake risk map is not yet refined	• Government staff and the public do not have adequate knowledge on earthquake
Tsunami	• Early warning system is unavailable • Risk map is not yet definitive • Evacuation map is not yet definitive	• Government staff and the public do not have adequate knowledge on tsunami
Flood	• Inadequate detecting equipment • Early warning system is not yet available • Flood risk map is incomplete • Inadequate flood control structures	• Spatial arrangement is not flood oriented • The community utilises the river in their daily life • Large number of people disposing waste into the river
Storm/Cyclone	• Storm early warning system is unavailable • Risk map is unavailable	• Houses are not storm/wind resistant

High Tide	• Early warning system is unavailable • Risk map is unavailable	• Inadequate knowledge • Culture of living near the coastal areas
Drought	• Drought forecast is unavailable in the local areas • Drought risk map is unavailable	• Lack of public awareness • Development planning is not disaster oriented
Environmental Pollution	• Pollution detecting equipment is not available • Lack of warning signs	• Lack of awareness to to be environmentally friendly • Traditional behaviour lacking environmental perspective • Development planning lacking/without environmental perspective
Landslides	• Inadequate warning signs at hazardous areas • Earthquake risk map is unavailable • Early warning system is unavailable	• Lack of awareness to avoid hazardous areas • Scarcity of land for settlement • Land ownership system involving the local culture
Volcanoes	• Early warning system equipment needs repair	• Public are not informed of hazards • No special organisation

Forest and land fires	• Forest locations are still open	• People living and utilising forests for their livelihoods. • Land clearing culture
Abrasion	• Warning of abrasion hazard is unavailable • Community organisations have not been established in hazard locations	• Inadequate knowledge of the community

4.1.3. CAPACITY

Unlike vulnerability, capacity reduces the risk of the impact of the disaster. The capacity element is generally related to how local institutional capacity is able to implement disaster management in an organised and systematic manner supported by the available resources.

As identified in the Disaster Management Plan of West Sumatera Province 2008-2012, West Sumatera Province has the following abilities:

1. The issuance of Local Regulation 5/2007 on Disaster Management. However, Disaster Management Agency of West Sumatera Province was established based on the approval of Minister of Home Affairs No. 061/3218/SJ dated 2 September 2009.
2. The System for Disaster Management Planning was issued pursuant to the Regulation of West Sumatera Governor No. 115/2008 concerning Disaster Management Plan of West Sumatera Province 2008-2012.
3. Disaster Management System is available despite unavailability of Disaster Management Standard Operating Procedures in some areas, minimum training, and lack of equipment.
4. Most areas have refugees management plans which require improvement in its implementation.
5. Disaster emergency command system has been established despite inadequacies such as equipment and socialisation as well as the fact that the stakeholders have not been fully involved.
6. Disaster management network has existed although it has not operated optimally due to the lack of communications between the government and non-government institutions.
7. Materials on preparedness are available, however, they are inadequate and causes inoptimal socialisation process.

8. Recording of disaster history.
9. Monitoring and evaluation process have been performed.
10. Process to develop preparedness has been performed.
11. The homogeneous composition of the community facilitates empowerment.

IV.2. LESSONS LEARNED FROM EARTHQUAKES

Several lessons learned from the earthquakes are as follows:

A. **Recovery which is not performed thoroughly weakens the preparedness of the disaster management system.** West Sumatera Province is categorised as one of the most earthquake prone areas and has been frequently affected by disasters. The opportunity to strengthen the existing disaster management system - which is available during the recovery phase - is not utilised optimally to encourage a change of paradigm in disaster management. In the repeatedly performed recovery processes, the system of disaster management, community awareness/culture, and recovery in the framework of development planning did not invest adequately to improve resistance and resilience against earthquakes. Consequently, sensitivity and resilience of the community and the earthquake management system are in fact reduced.

B. **Instead of being killed by earthquakes, people were killed by earthquake vulnerable building constructions.** Buildings affected by earthquakes were rebuilt without observing earthquake resistant principles and no sanctions were given for that. Buildings which were moderately and lightly damaged were not repaired according to the structural provisions. This is perhaps due to the absence of a building code along with its enforcement measures. Buildings which had not been damaged were not inspected of its earthquake resistance. Several government buildings may be constructed or reconstructed with deviations from the ideal specifications and standards. Consequently, those buildings cause death during the reoccurrence of earthquakes.

IV.3. CHANGE IN DISASTER MANAGEMENT PARADIGM

A disaster having a severe impact provides a strategic opportunity for a change of disaster management paradigm to the government and the community. Strategic measures with a disaster risk reduction perspective in the post disaster context, motivated to prevent deaths and losses, will make the people and government of West Sumatera to be more resilient to disasters. On the contrary, failure to utilise the strategic opportunity during the post disaster phase will make the vision “WEST SUMATERA PREPARED, RESILIENT, AND RESOLUTE IN FACING DISASTER” a mere slogan which do not provide a sense of safety to the community.

In an effort to realise the change of paradigm, the government and people of West Sumatera will accelerate the review of the provincial Disaster Management Plan as mandated by the Disaster Management Plan of West Sumatera Province which is planned for the third year (2010).

Several strategic measures during the momentum for recovery are as follows:

IV.3.1. REFORM OF REGULATORY AND INSTITUTIONAL INSTRUMENTS

In terms of ideological perspective, West Sumatera can no longer take a reactive stance and wait for disasters to occur, instead the paradigm must be changed to proactively control risk factors by reducing vulnerabilities and promoting disaster management capacity in an integrated manner in the administration of government and daily life. This means seriously utilising the recovery phase in the next two years, and involving stakeholders at all levels including and particularly the community recently affected by the disaster.

One of the most important steps in the change of paradigm during the post-disaster phase this time is to translate the provisions of Local regulation 5/2007 on Disaster Management from the normative level into concrete, protective and progressive regulations, structures and behaviours.

Pursuant to three most relevant laws, namely Law 24/2007 on Disaster Management, Law 26/2007 on Spatial Arrangement and Law 27/2007 on Management of Coastal Areas and Small islands, the local government will issue regulatory provisions in the next two years which consist of:

1. Regulation on rehabilitation and reconstruction of physical buildings based on earthquake resistance standards.
2. Regulations on rehabilitation and reconstruction which place infrastructure, facilities and public space as the first and strongest line of defense against disaster.
3. Regulations on disaster risk reduction based government administration.

In terms of institutional structure, West Sumatera - based on Local regulation 5/2007 and Regulation of Minister of Home Affairs No. 46/2008 on Organisational Guidelines and Procedures of Local Disaster Management Agency, and Regulation of Head of National Agency for Disaster Management No. 3/2008 on Guidelines for the Establishment of Local Disaster Management Agency (BPBD) – will immediately establish and provide due authorities to Local Disaster Management Agency. This body is designed to serve as one of the best institutions in Indonesia in its structure, attitude, actions, resources and services in terms of the coordination, command and executing element functions in the implementation of disaster management.

The functions of BPBD are as follows:

1. Formulating and setting policies for disaster management and refugee management by acting quickly, accurately, effectively and efficiently.
2. Coordinating the implementation of disaster management activities in a planned, integrated and comprehensive manner.

Whereas its duties are as follows:

1. Setting guidelines and directions in accordance with the Local Government policies and the National Agency for Disaster Management on the effort for disaster management which includes disaster prevention, emergency management, rehabilitation as well as reconstruction in a fair and equal manner.
2. Setting standardisation as well as needs of the implementation of disaster management based on the regulatory laws.
3. Developing, setting and providing information on disaster risk map
4. Developing and establishing Standard Operating Procedures for Disaster Management.
5. Performing disaster management in its areas.
6. Reporting the implementation of disaster management to the head of local government on a monthly basis during normal condition and on a real time basis during disaster emergency conditions.
7. Managing the collection and channelling of cash and goods.
8. Accounting for the use of funds received from the local government budget.
9. Performing other duties in accordance with the regulatory laws.

Although the establishment of BPBD at the district/municipality level is optional based on the existing level of threat, West Sumatera will ensure that district/municipality government establish BPBD in accordance with the existing threat level, which is integrated at the provincial level to serve as a cooperative, effective and accountable institutional system.

In order to mobilise the potential of the community, including the business community, academicians and international institutions, and in their interaction with the institutional system of the government, BPBD West Sumatera will establish a Disaster Risk Reduction Platform at the Provincial and district/municipality levels. This platform will be governed by the community coordinated and supported by BPBD and functions as a vehicle to discuss policies and the implementation of disaster management, especially for the promotion of the disaster conscious culture, while the local government remains to hold the main responsibilities as mandated by the regulatory laws.

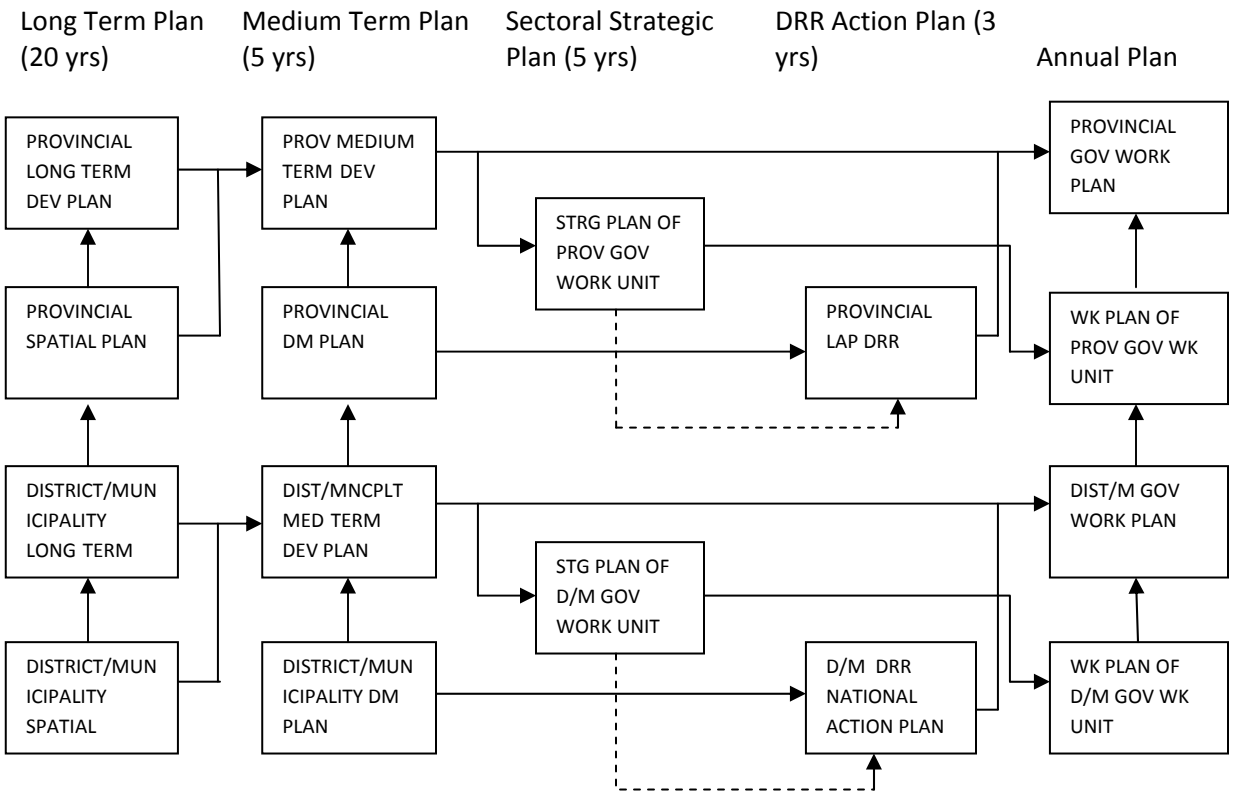
IV.3.3 DISASTER MANAGEMENT PLANNING

West Sumatera positions Disaster Management planning as, first, a mechanism whereby abstract regulatory provisions turns into concrete activities which will improve resilience against disaster upon their implementations.. Second, as a bridge linking disaster management principles with the process and resource mainstreams of the development planning system.

In this relation, a central role will be played by BPBD, Bappeda, and Spatial Arrangement Agency under the direct coordination of the Local Government Secretary on behalf of the Governor as the leader. This planning will emphasise on the 2010 and 2011 rehabilitation and reconstruction period, whereby the recovery effort combines the national and provincial mandates and resources. The Provincial Medium Term Development Plan of the Governor established 2010 as a crucial year. Therefore, all efforts will be undertaken to ensure that the agenda for the disaster risk reduction in post disaster context will serve as one of the key issues during the governor election and in the revision of its mission following the election of the successful candidate . These are framed in Local Regulation No. 7/20087 on the 2005-2025 Provincial Long Term Development Plan.

This main framework is subsequently translated into Strategic Plans of Local Government Work Units incorporating disaster management elements into Local Action Plan for Disaster Risk Reduction . At this point, the Local Action Plan is performed through the Local Government Work Unit and supplements the work plan of the Local Government Work Unit.

Figure IV.4.
Position of Provincial/District/Municipality Disaster Management Plan and Local Action Plan for Disaster Risk Reduction (LAP-DRR) in the Structure of the Local Development Planning System



DISASTER RISK MITIGATION

The vision of West Sumatera Province related to disaster management as stated in the 2008-2012 Disaster Management Plan of West Sumatera Province is:

"WEST SUMATERA PREPARED, RESILIENT, AND RESOLUTE IN FACING DISASTER"

The following missions are established in order to achieve the vision:

1. Reducing disaster risk by developing preparedness and infrastructures in all lines in a planned and integrated manner.
2. Developing community and institutional resilience during crisis period.
3. Performing physical and psychological recoveries from the impact of disasters.

The mitigation effort has been planned systematically in the Disaster Management Plan of West Sumatera Province as follows:

Regulation and policy	Community capacity building
1. Establishment of relevant disaster management regulatory laws at the provincial level. 2. Establishment of a Working Group for the acceleration of the development of District/Municipality Regulations on Disaster Management. 3. Facilitation of the working Group in preparing relevant disaster management law/regulation at the district/municipality level. 4. Improvement of quality and quantity of BPBD human resources 5. Provision of BPBD facilities and infrastructures 6. Development of District/Municipality BPBD Module and Standardisation, 7. Replication of BPBD module and standardisation in West Sumatera Province **Provision of adequate budget and technical capabilities** 1. Developing cooperation among heads of local governments for disaster management 2. Developing internal working network for West Sumatera Province 3. Developing provincial and national	1. Improving the capacity of local government staff on disaster management, 2. Development of standardisation to improve the capacity of the community in disaster management, 3. Development of the module for the standardisation of disaster prepared community system 4. Replication of module and standardisation of community preparedness system in west Sumatera 5. Development of disaster preparedness school curriculum 6. Provision of supporting facilities and infrastructure for the implementation of the local curriculum content 7. Organising Disaster Preparedness Culture Week **Diversification of income for population at disaster prone areas,** 1. Development of alternative livelihood for coastal community at safe areas 2. Monitoring the rate of success for the diversification of livelihood at vulnerable areas **Improvement of infrastructural capabilities**

working network for disaster management	1. Development of disaster management - based regional development and management plan 2. Management and development of disaster management - based areas **3.** Development of guidelines for the formulation of Disaster Risk analysis Document of West Sumatera Province

IV.5. PREPAREDNESS

Preparedness is a series of activities performed to anticipate disasters through organisation as well as effective and efficient measures (training, simulation, preparation of facilities and infrastructures, HR, logistics an funding). Sound preparedness effort is expected to expedite disaster management effort, thereby minimising the number of victims and damages,

Preparedness against disaster should be performed by all parties including the government, business community as well as the public through:

1. Development of plan and mechanism for Disaster Management of West Sumatera Province
2. Developing a disaster early warning system covering West Sumatera Province by prioritising local wisdom, including the organisation, installation and testing of the early warning system as well as correct and appropriate operation and maintenance.
3. Development and pilot testing of the disaster emergency management plan
4. Organisation, delivery of extension services, training, simulation, on emergency response mechanism
5. Preparation of evacuation location
6. Development of accurate data and information and updating of standard operating procedures for disaster emergency response
7. Provision and preparation of materials, goods, and equipment for the restoration of facilities and infrastructures.

Early warning is performed to enable quick and accurate action in order to reduce disaster risk as well as to prepare emergency response. Early warning is performed through:

1. Observation of disaster signs
2. Analysis of the result of observation

3. Decision making by the authorised party
4. Dissemination of disaster warning information
5. Community participation

The community must also participate in disaster preparedness. Community disaster preparedness may be performed by providing knowledge and understanding on:

1. Disaster emergency management plan
2. Community organisation
3. Early warning system
4. Provision and preparation of basic necessities
5. Emergency response mechanism
6. Preparation of evacuation location and
7. Prioritising vulnerable groups.

CHAPTER V

REHABILITATION AND RECONSTRUCTION FRAMEWORK

V.1. BASIC PRINCIPLES OF REHABILITATION AND RECONSTRUCTION

The government has responded the 30 September 2009 earthquake by establishing 4 strategic measures for the management of the West Sumatera earthquake in a Closed Cabinet Meeting on 15 October 2009 as follows:

1. Establishing the status of the disaster as Disaster of West Sumatera Province, which has a broad social and economic impact as well as attracting the attention and support from the government;

2. Provision of Funds consisting of Rehabilitation and Reconstruction funds of the relevant sector sourced from the Government and Local Government and Grants from disaster relief funds and grants from Bilateral and multilateral donors/institutions;

3. Performing damage and loss assessment followed by estimation of the recovery needs including the social dimension;

4. Establishment of executing agency for the Rehabilitation and reconstruction through a presidential regulation;

5. The strategic measures of the government are elaborated in recovery components in line with the damage and loss assessment as well as the social recovery needs assessment, consisting of 5 (five) recovery clusters as follows: 1) Housing and settlement infrastructures, 2) Public infrastructures; 3) Social; 4) Productive Economy; and 5) Cross sector.

V.2. GENERAL POLICY OF REHABILITATION AND RECONSTRUCTION

In line with the disaster risk reduction effort in the post disaster context, including lessons learned from the 30 September 2009 and 1 October 32009 earthquakes in West Sumatera Province, as well as the change of the disaster management paradigm based on Law No, 24/2007 on Disaster Management; taking into account that the damage on the housing component is very dominant, and that it will impact the socio-economic life of the disaster victims, the

rehabilitation and reconstruction activity in West Sumatera Province prioritises the following basic principles:

1. Using the rehabilitation and reconstruction activity as a vehicle to develop communities, create employment and stimulate the people's economy; in order to achieve the objective of sustainable medium and long term development with preparedness, mitigation, and disaster risk reduction approaches;

2. Performed with the approach of corruption control and good governance, through effective coordination among stakeholders as well as prioritising the aspirations of the disaster victims.

3. Performed with the principle of sustainable development, hence development activities need to observe a long term impact;

4. Performed by managing natural resources to fulfil the current human and community needs without affecting the ability of future generations to fulfil their needs.

5. Performed with observance to the socio-economic life of the disaster victims taking into account gender equality emphasising vulnerable groups such as the disabled, the poor, families with single female head of household, the elderly and orphans;

6. Performed utilising local natural resources prioritising the principle of efficient spatial allocation, reducing pollution, reusing and recycling available resources, and utilising renewable energy as an alternative source of energy;

7. The recovery of the housing component and community life are performed through a community participation approach in accordance with the local culture; and also improving the understanding of the community of disaster risk reduction;

8. Housing repair is performed with observance to technical standards for disaster/earthquake prone areas, including building code and others ; in accordance with applicable regulations;

9. Performed prioritising transparency to all stakeholders by providing accurate information as well as technical services, permits and the establishment of disaster victims complaint unit.

10. Performed through fund channelling mechanism in compliance with the applicable regulatory laws.

11. Performed particularly by the local Government in accordance with its mandates, through effective coordination and cross sectoral cooperation, taking into account monitoring and control mechanism in accordance with the applicable regulatory laws;

12. With consideration to the scale and impact of the damage, recovery activities will be performed for 2 fiscal; years, initiated with preparatory activities in the 4th quarter of the 2009 fiscal year, during the 2010 fiscal year and concludes in 2011 fiscal year.

V.3. REHABILITATION AND RECONSTRUCTION SCENARIO

The post disaster recovery scenario is developed based on the assumption of available resources, especially fundings from the Government and local government as well as initial condition prior to the disaster. Based on the assumptions, the target of the recovery effort may be grouped into three scenarios as follows:

1. Scenario I: Excessive funding resource, the recovery effort is expected to develop the area comprehensively, and not limited to the damage and loss sector and the area of the disaster affected community.

2. Scenario II: Adequate funding, the recovery effort is expected to be able to exceed the minimum standard of development, including all damage and loss sectors in the areas of the earthquake affected community.

3. Scenario III Inadequate funding, recovery effort is prioritised for housing, minimum service standards and assistance to stimulate the people's economy.

Considering the broad impact of the disaster on the socio-economic life of the community, government efforts up to December 2009 were focused on humanitarian assistance and restoration of basic services funded by the state budget; and housing recovery from funded by disaster management funds of the state budget and local government budget. In order to have a better development, funds from non-government sources are needed to support rehabilitation and reconstruction, coordinated by the government through mobilisation and empowerment strategy of non-government funds since the beginning and during the implementation of the rehabilitation and reconstruction as follows:

1. Reallocation of ongoing programmes and/or programmes in pipeline status
2. Reallocation of foreign loans
3. Utilisation of bilateral and multilateral foreign grants for immediate short term recovery
4. Utilisation of bilateral and multilateral foreign grants for housing reconstruction and socio-economic recovery
5. Utilisation of bilateral and multilateral foreign grants for capacity building of the government and local government

Considering the fact that West Sumatera Province is prone to disasters such as volcanic eruptions, flood, earthquake and unstable land movements, disaster risk reduction must be mainstreamed into each rehabilitation and reconstruction planning and implementation.

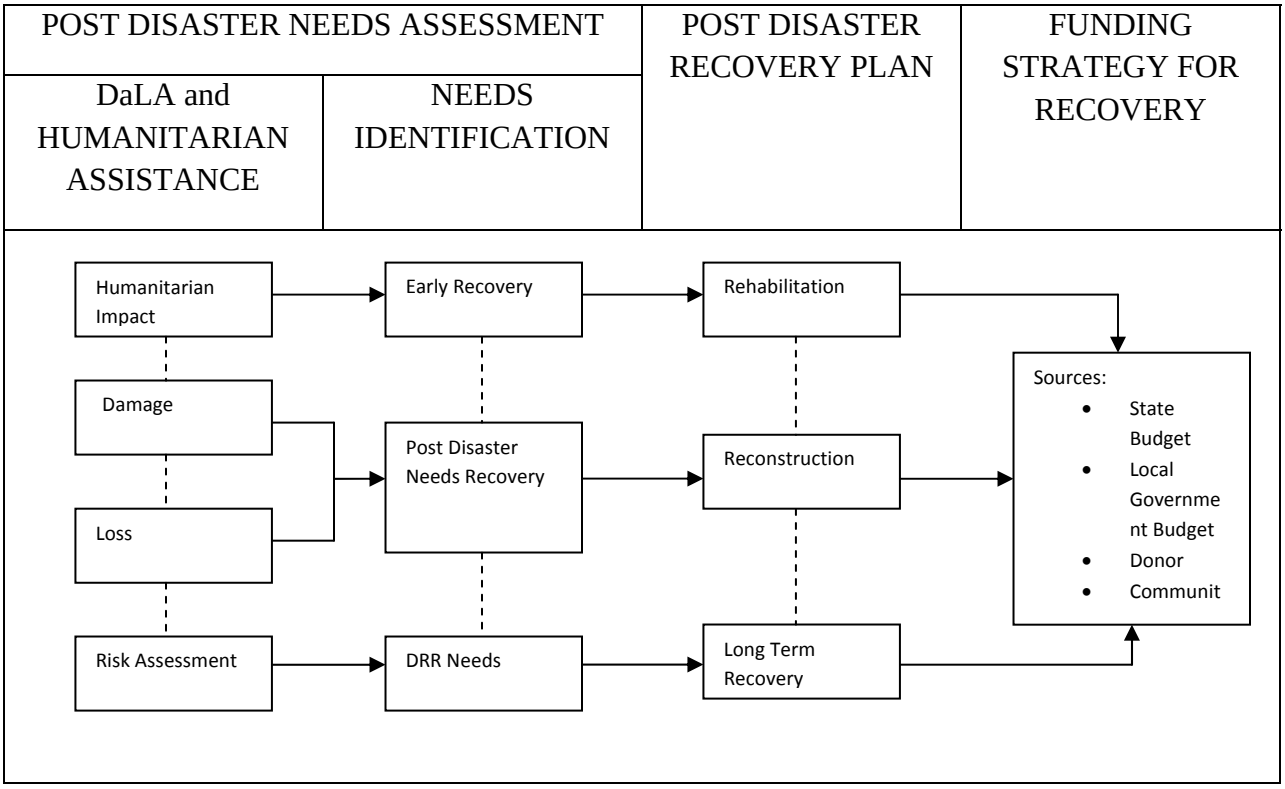
V.4. SCOPE OF REHABILITATION AND RECONSTRUCTION POLICY

Principally, post-natural disaster rehabilitation and reconstruction are the efforts to restore the condition and life of the disaster affected community and environment by restoring the functions of institutional structures, facilities and infrastructures at the disaster affected areas.

The rehabilitation and reconstruction needs are estimated based on Damage and Loss Assessment performed by BNPB, Bappenas and the world Bank, complemented by Human Recovery Needs Assessment conducted by the Inter Agency Steering Committee coordinated by UNDP to obtain Post Disaster Needs Assessment.

The interrelation between DaLA and HRNA provide a feedback for the recovery needs by placing the disaster affected community and culture environment and non-culture as targets of the disaster recovery.

Figure V.1.
Post- Disaster Needs Assessment



The results of the HRNA serves as inputs for the post disaster recovery of government, socio-cultural as well as economic systems of West Sumatera Province. Fundamental recovery needs identified are as follows:

1. Access to food, clean water and sanitation, as well as housing.
2. Livelihood
3. Access to health services, education and other social services.
4. Access to educational services and other social services.
5. Access to government services related to demography (Citizen identification card, birth, death, marriage, permit, titles and others).
6. Public space for religious, social and cultural activities.

Disaster affected community, particularly poor population in rural areas, lost most options to overcome post natural disaster crisis. Therefore, the government must provide assistance at the earliest stage for post-disaster crisis management. The government assistance is initiated from emergency response activity, followed by transitional assistance to prepare the implementation of rehabilitation and reconstruction. The philosophy of the government

assistance is to provide access to preparedness knowledge, mitigation and disaster risk reduction in order to prevent prolonged crisis situation which may disrupt security and order.

The scope of the general policy for rehabilitation and reconstruction consists of:

1. Assistance/stimulus from the government and local government for food/nutrition, clean water and sanitation, settlement and livelihood components.
2. Implementation of educational services, health and other social services.
3. Demolition of unusable and hazardous buildings and rubble clearance to be reconstructed in compliance with zoning and building codes.
4. Reconstruction or physical repair of various public infrastructures in compliance with public building safety principles in order to restore public services.
5. Regulatory/policy support to accelerate recovery and other efforts that may encourage local economic recovery.
6. Community empowerment to improve preparedness, prevention and disaster risk reduction through various awareness raising and educational activities in order to develop a safety culture through local wisdom.
7. With a safety approach, pursuant to Article 32 of Law No. 24/2007 on Disaster Management, the government may prohibit the utilisation of disaster prone areas for settlements and/or withdraw or reduce individual right of ownership over certain objects to a certain degree or entirely, in accordance with regulatory laws.

V.5. GENERAL STRATEGY FOR REHABILITATION AND RECONSTRUCTION

The general strategy for post-earthquake recovery in the southern region of West Sumatera Province is established observing:

1. Social, economic and cultural conditions of the community.
2. Environmental conservation and disaster risk reduction.
3. Benefits and effectiveness of assistance for the natural disaster victims.
4. Covering 12 (twelve) districts/municipalities in West Sumatera Province, consisting of:
    a) Padang City
    b) Pariaman City
    c) Solok City
    d) Padang Panjang City
    e) Tanah Datar District
    f) Padang Pariaman District
    g) Mentawai Archipelago District
    h) Agam District
    i) Solok District
    j) Pasaman District
    k) West Pasaman District
    l) South Pesisir District

Based on the initial DaLA conducted by BNPB, Bappenas, UNDP and World Bank per 26 October 2009 regarding the 30 September and 1 October earthquakes in West Sumatera Province, the community housing component sustained the largest percentage of damage and loss **(74%)**; followed by productive economy **(11%)**, social component **(7%)** and infrastructure component **(5%)** and cross-sectoral component particularly government offices **(3%)**. The composition of the damage and loss of the government and private assets are **11%** and **89%** respectively, with a **Rp. 20,86** trillion total damage and loss. With observance to the post-natural disaster condition, the general strategies for the recovery are as follows:

1. **Recovery of Housing and Settlement Infrastructures**; seeks to encourage immediate recovery of social, economic and cultural lives of the disaster affected community.
2. **Restoration of Public Infrastructure**; seeks to immediately restore access between regions, electricity, clean water and sanitation.
3. **Social Recovery**; seeks to immediately restore learning activities, health services, cultural and religious activities, as well as services for vulnerable groups and the poor.
4. **Productive Economy Recovery**; seeks to immediately restore economic activities of the community, inter-regional trade, labour intensive industries as well as banking/financial services and revitalisation of tourism along with its secondary activities to support local economic growth.
5. **Cross-sectoral Recovery**; particularly to rebuild and repair government buildings in accordance with principles of earthquake resistant construction as well as to restore public services.

V.5.1. GENERAL STRATEGY FOR RECOVERY OF HOUSING AND SETTLEMENT INFRASTRUCTURES

A. MAIN ISSUES

1. The loss of living space and housing in severely damaged settlement occupied mostly by vulnerable groups, created the potential to increase poverty and cause social vulnerability.
2. A number of severely/moderately/lightly damaged house occupants rebuilding their houses without guidance on earthquake resistant construction will create the risk of repeated damage and are not certified to receive stimulus from the government.
3. Destroyed /severely damaged houses were located in non-settlement locations mostly occupied by vulnerable groups;

4. Occupants of destroyed /severely damaged houses who do not have legal land and building ownership status.
5. Occupants of destroyed /severely damaged houses who are female head of household with a number of dependants;
6. Occupants of destroyed /severely damaged houses located in high risk areas who need to be relocated;
7. The potential for other disaster to occur, such as epidemy and health issues at refugee location due to decreasing sanitation quality;
8. Loss/damage of production equipment at home businesses;
9. Lack of transportation access to destroyed /severely damaged houses hindering mobilisation of building materials and provision of facilitation services.

B. RECOVERY STRATEGY

Pursuant to Government Regulation No. 21/2008 on Implementation of Disaster Management, the main principles of **community housing repair assistance** are as follows:

1. The mentioned assistance refers to government assistance for the community to repair houses which are damaged by the disaster following earthquake resistant technical standards in compliance with the provisions of regulatory laws.
2. The mentioned assistance may take the form of a temporary shelter, building materials, housing components or cash which amount is established based on the evaluation of the level of housing damage,
3. In order to accelerate recovery, the priorities for early recovery are the repair of lightly damaged houses funded by the local government and moderately damaged houses funded by the government.
4. Due to the fact that the repair of severely damaged community housing requires a longer period of time, the provision of transitional housing as well as clean water and sanitation infrastructures - in compliance with the minimum service standards – are prioritised for early recovery.
5. The mentioned assistance is provided through community empowerment mechanism, observing the local characteristics and community culture, in accordance with the mechanism established by the government;
6. The reconstruction of housing facilities and infrastructures must be based on the technical planning guidelines, observing the inputs of the relevant agencies/institutions and public aspiration of the disaster affected areas.
7. The community housing repair assistance is performed through technical guidance and technical assistance of the relevant agencies/institutions which are mobilised at the earliest possible time to assist the community desiring to perform housing repair as soon as possible.

8. Settlement relocation according to the concept of the government will be performed , in the event that the government establishes disaster prone areas as a prohibited areas for settlement.
9. Repair of housing and settlement infrastructures seeks to create a safer and more healthy environment and may be implemented directly by the community.
10. Education and capacity building of the community on preparedness, mitigation and disaster risk reduction may be delivered through the implementation of housing and settlement infrastructures repair.

V.5.2. GENERAL STRATEGY FOR PUBLIC INFRASTRUCTURE RECOVERY

A. MAIN ISSUES

1. Land transportation from and to Padang Pariaman District are cut off due to the earthquake and landslide.
2. Disrupted electricity and telecommunication services at severely damaged public buildings and houses.
3. Disrupted clean water service due to damage to public buildings.
4. Poor sanitation due to the lack of clean water supply.

B. RECOVERY STRATEGY

Pursuant to Article 67 of Government Regulation No. 21/2008 on Implementation of Disaster Management, the main principles of the recovery of public infrastructures are as follows:

1. The reconstruction of public facilities and infrastructures must observe the policy of the relevant sector and provincial and district/municipality spatial plan;
2. The reconstruction of public facilities and infrastructures must be based on technical plannings in accordance with applicable regulations observing inputs from the relevant agencies/institutions;
3. The application of appropriate designs and utilisation of better equipment are developed through research and development observing the conditions of the damage, local wisdom and adjusted to the level of disaster vulnerability of the relevant area.

V.5.3. GENERAL STRATEGY FOR SOCIAL RECOVERY

A. MAIN ISSUES

1. Learning activities were disrupted by the loss/damage to educational facilities and infrastructures, causing approximately 120.000 elementary and secondary school students to attend emergency schools.
2. Reduced capacity for in-patient care, medical response and health services for the community.
3. Reduced capacity of social services decreasing the quality of life of the disabled, elderly and orphans.
4. Damage/loss of prayer facilities which are symbols of solidarity of the Minang community and forums for social cohesion.

B. RECOVERY STRATEGY

Pursuant to Government Regulation No. 21/2008 on Implementation of Disaster Management, the main principles for the revitalisation of the socio-cultural life of the community will be performed through the following efforts:

1. The priorities for the early recovery are educational facilities and infrastructures, health and social services.
2. The reconstruction of facilities and infrastructures must be based on technical plannings observing inputs from the relevant agencies/institutions , the local government and the aspirations of the disaster affected community.
3. Physical activities for the reconstruction of the mentioned facilities and infrastructures shall observe the spatial plan.
4. The mentioned technical planning shall be performed in such a way, observing disaster risk potential and building codes in accordance with the applicable regulations, so that the building may used for evacuation.
5. Continuing the learning process and equipping the emergency school with adequate teachers and facilities.
6. Continuing health services through health service centre for those needing it, including a) counselling and family consultation, b) trauma recovery assistance and c) training for psychological conditions recovery.
7. Continuing social services particularly for the disabled, children and elderly.
8. Providing assistance for the reconstruction of the prayer facilities of the community.

V.5.4. GENERAL STRATEGY FOR THE RECOVERY OF PRODUCTIVE ECONOMY

A. MAIN ISSUES

1. The earthquake significantly impacts the productive sector, particularly trade and industry/SMEs in the urban areas and agriculture/fish farms in the coastal areas as well as those with home based businesses.
2. The challenge of restoring activities related to the tourism sector as they stimulate trade activities and SME.
3. In the financial sector, it is estimated that 2.000 borrowers will be affected and a portion of the bank loan portfolios are predicted to turn into non-performing loans.
4. In the agricultural sector, the damage to infrastructures such as irrigation systems and fish farms will affect the livelihood of populations in the villages and coastal areas.
5. In the fishery sector, damage to fish landing docks and fish auction centre will affect the income of the fishermen.

B. RECOVERY STRATEGY

1. The early recovery strategy is to provide stimulus to the disaster affected micro/small enterprises in order to restore their livelihood.
2. Subsequently providing assistance in accordance with the targets to SMEs, including the provision capitals to feasible enterprises which are not yet 'bankable'.
3. Loan restructuring policy and start-up business capital are needed by debtors affected by the disaster.
4. For micro/small enterprises in housing areas, the assistance will be delivered along with/upon the completion of the housing construction.
5. The reconstruction of trade, tourism and banking/financial facilities and infrastructures must be based on technical planning observing disaster risk potentials and applicable building codes.
6. Physical activities for the reconstruction of the mentioned facilities and infrastructures shall observe spatial plan.
7. Provision of temporary markets at strategic locations during the recovery period.
8. The government shall encourage the use of building insurance against natural disasters.

V.5.5. GENERAL STRATEGY FOR CROSS-SECTORAL RECOVERY

A. MAIN ISSUES

1. Numerous government buildings were destroyed, both in Padang as well as other districts/municipalities, causing the disruption of government services.
2. In order to perform the services, government documents need to be salvaged and secured.
3. Office equipment are needed to perform the service functions.

4. Mitigation effort to protect the forests and steep slopes, as well as the revitalisation of coastal areas as a limited development zone are needed.

B. RECOVERY STRATEGY

1. The priority of early recovery is to provide a temporary place for the government to restore its services to the public, particularly for the key player of the rehabilitation and reconstruction activities.
2. The reconstruction of government facilities and infrastructures shall be based on technical plannings observing disaster risk potentials and applicable building codes.
3. Physical activities for the reconstruction of the mentioned facilities and infrastructures shall observe spatial plan.
4. Providing technical assistance to strengthen the capacity of the local government to implement the rehabilitation and reconstruction.
5. Management of rubble disposal and recycling site.
6. Mainstreaming of disaster risk reduction in the recovery plan.

V.5.6. DISASTER RISK REDUCTION

Based on the lessons learned from the 12 September 2007 and 30 September 2009 earthquakes, disaster risk reduction is a strategic approach in the rehabilitation and reconstruction framework and long term recovery. Apart from those integrated into each of the recovery component strategy, the local government proposed disaster risk reduction policy and institutional framework as follows:

1. Revision and development of a contingency plan as well as the development of standard operating procedures for the districts/municipalities.
2. Revision and development of provincial/district/municipality disaster management plan.
3. Revision and development of district/municipality spatial plan.
4. Development of zoning code and building code guidelines.
5. Facilitation for the establishment of Local Disaster Management Agency.
6. Strengthening of disaster management command and operation centre including early warning.
7. Strengthening of public institutional capacity in preparedness, mitigation and disaster risk reduction.

V.6. PHASES OF THE REHABILITATION AND RECONSTRUCTION IMPLEMENTATION

In accordance with the scope of the policy for rehabilitation and reconstruction and the scale of the damage caused by the earthquake, the rehabilitation and reconstruction shall be performed over 2 fiscal years; starting from the 2010 fiscal year up to the 2011 fiscal year. The post-earthquake recovery of West Sumatera consist of 3 (three) phases, namely: early recovery phase, rehabilitation phase and reconstruction phase. The general objective of the implementation of each phase is to accelerate the recovery of the community at the post-disaster area.

1. **Early Recovery Phase** shall be performed immediately within 1-3 months, highly likely to overlap humanitarian relief activities, with the objectives of restoring socio-psychological conditions of the disaster victims, providing temporary shelter and basic services and undertaking various preparations for the implementation of rehabilitation and reconstruction, including funding mobilisation in accordance with the mechanism of applicable regulations and laws. During the early recovery phase - a transitional period from post-disaster emergency to rehabilitation - a fast fund channelling mechanism is needed to implement basic services for the disaster victims.

2. **Rehabilitation Phase** shall be performed within 3-12 months following the end of the emergency response period, as a response to various urgent and immediate issues. Pursuant to Article 58 of Law No. 24/2007 on Disaster Management, the rehabilitation shall be performed through: the repair of the disaster affected areas; repair of public facilities and infrastructures; community housing repair assistance; socio-psychological recovery; health services; conflict reconciliation and resolution; socio-economic and cultural recovery; restoration of security and order; recovery of government functions and public services. During this phase, the mechanism of community assistance as well as the revitalisation of public infrastructures need to include a policy for mitigation and disaster risk reduction.

3. **Reconstruction Phase** shall be performed within 6-24 months overlapping with the rehabilitation activity, with the objectives of restoring the system in a comprehensive manner and to integrate various development programmes into the local development approach. Pursuant to Article 59 of Law No. 24/2007 on Disaster Management, reconstruction shall be performed through the 'build back better' approach consisting of: (i) reconstruction of facilities and infrastructures, (ii) reconstruction of social facilities of the community, (iii) revitalisation of the social and cultural lives of the community, (iv) application of sound designs and utilisation of better and earthquake resistant equipment, (v) improvement of participation of community organisations, business community and the public, (vi) improvement of social, economic and cultural conditions, (viii) improvement of public services, and (ix) improvement of primary public services.

During the reconstruction phase, a policy shift of paradigm toward disaster risk reduction needs to be integrated into the development planning and spatial management.

The following table describes action priorities based on the rehabilitation and reconstruction phases to serve as guidelines for the formulation of the rehabilitation and reconstruction activities.

Table V.1.
Phases and scope of rehabilitation and reconstruction

Phase / Component	Quarter IV-2009 Early Recovery	2010 Rehabilitation and Reconstruction	2011 Rehabilitation and Reconstruction
Recovery of Housing and Settlement Infrastructures	• Implementation of post-emergency response assistance • Assisting the community with the repair of moderately/lightly damaged houses • Provision of temporary shelter for occupants of heavily damaged houses • Providing technical assistance for the construction of earthquake resistant houses	• Completion of disaster victims housing construction • Completion of settlement infrastructure construction • Relocation of settlements at disaster risk areas	
Recovery of Public Infrastructures	• Recovery of transportation access • Provision of clean water and sanitation services • Provision of electricity and telecommunication services for strategic infrastructures • Repair of simple irrigation system to revitalise agricultural	• Construction of roads and bridges • Restoration of electricity, clean water and telecommunicatio n services for housing, government offices and public facilities • Repair of technical as well	• Provision of electricity, clean water and communication services for restored government offices and public facilities

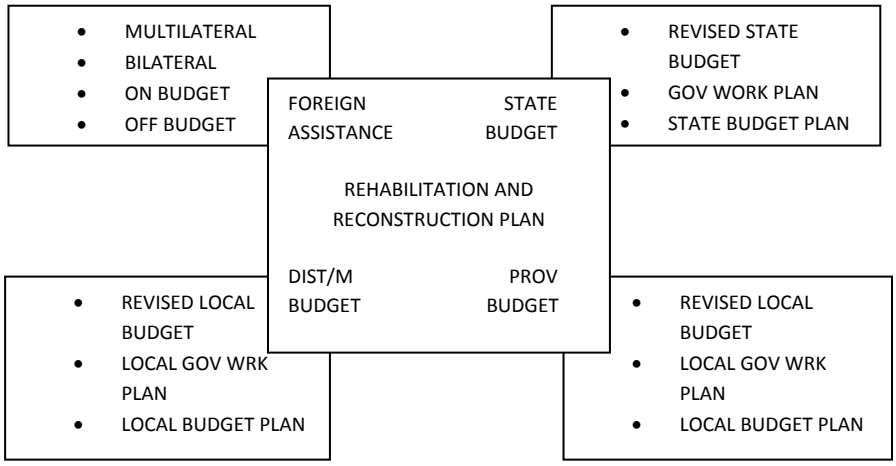
	activities	as non-technical agricultural irrigation systems	
Social Recovery	• Provision of temporary space and facilities for educational, health and social services • Provision of replacement/additional HR for educational, health and social services	• Reconstruction of government owned economic facilities and infrastructures • Provision of facilities to improve the quality of educational, health and social services	• Improvement of the quality of public educational, health and social services
Recovery of Productive Economy and People's Economy	• Provision of temporary space for government owned economic infrastructures • Initial economic stimulus for micro/small enterprises in urban and rural housing areas to revitalise livelihood	• Reconstruction of government owned economic facilities and infrastructures • Capital assistance scheme for small/medium businesses	• Recovery of all facilities and infrastructures of the productive economy to support the development of tourism, industry and trade potentials
Cross-sectoral Recovery	• Provision of temporary space for government offices, particularly in village and sub-district areas • Provision of equipment and facilities for government services • Provision of technical assistance to improve the capacity of the local government in implementing rehabilitation and reconstruction, including environmental management	• Construction of government offices • Implementation of government services to perform and manage rehabilitation and reconstruction activities • Provision of technical assistance for the revision of the Regional Spatial Plan and the development/revision of the DM Plan	• Improvement of capacity for disaster risk reduction based spatial management • Technical assistance to develop exit strategy

V.7. SCHEME OF FUNDING FOR REHABILITATION AND RECONSTRUCTION

Chapter IV of Government Regulation No. 21/2008 on Implementation of Disaster Management stipulates that:

1. In performing rehabilitation and reconstruction, the district/municipality government shall utilise district/municipality government budget;
2. In the event that the local budget is insufficient, district/municipality government may request assistance from the provincial and/or central government to implement the rehabilitation and reconstruction;
3. Request for funding assistance from the district/municipality government must be made through the relevant provincial government;
4. In addition to the funding request, the district/municipality government may also request assistance from the provincial and/or central government in the form of: a) Expert Staff, b) Equipment, and c) Infrastructure development.

Figure V.2.
Funding sources for rehabilitation and reconstruction



Source: Bappenas, 2009

With the approach '**build back better**', in accordance with Government Regulation No. 22/2008 on Funding and Management of Disaster Assistance, the source of funding for disaster management is the joint responsibilities of the central and local governments. The West Sumatera disaster management funds consist of:

1) The state budget (APBN) through ready to use fund
2) The state budget coordinated by BNPB
3) Local government budget (APBD) coordinated by BPBD
4) Natural disaster assistance through APBN/APBD
5) Relocation of foreign loans
6) General Allocation Fund (DAU)
7) Deconcentration Fund
8) Special Allocation Fund (DAK)
9) Mandatory (licensing)/Insurance
10) Foreign grants through the account of Minister of Finance
11) Grants from national companies/private sector/communities
12) Participation of public fund

Based on the damage and loss assessment; majority of the assets damaged by the 30 September 2009 and 1 October 2009 earthquakes were owned by the community (88%).
Based on asset ownership and recovery components, the funding scheme for the rehabilitation and reconstruction are as follows:

Table V.2.
Funding scheme for rehabilitation and reconstruction

Source / Component	Private/Companies/Public	Private/Companies Supported by Government*)	Government Funding*) Supported by Public	Full government funding*)
Recovery of Housing and Settlement Infrastructures	Housing and Settlement Infrastructures		Stimulus for community housing repair**)	
Recovery of Public Infrastructures and Improvement of Services		electricity, clean water and telecommunication		Road & bridges, Irrigation and agricultural infrastructures
Social and Cultural Recovery	Private owned educational, health and social facilities	Private owned + insurance scheme educational, health and social facilities		Government owned educational, health and social facilities

Recovery of Productive Economy and People's Economy	Private owned trades, hotels, tourism, financial institutions, agriculture		Government owned trades, hotels, tourism, financial institutions, agriculture	
Cross-sectoral Recovery particularly government	Financial stimulus (CSR) with SME policy support	Financial stimulus (CSR) with SME policy support	PNPM (National Programme for Community Empowerment) Stimulus	Government offices

*) including support from international donor institutions/countries, as well as the support of local government budget (APBD)

**)housing stimulus sourced from APBN and APBD

Table V.3.

Matrix for Strategy and Phases of Post-Earthquake Recovery in West Sumatera Province

No	Recovery Component/ Programme	Prioritised Activity	Target Location/Disaster Affected Areas	Implementation Period			Source of Funding
				2009	2010	2011	
I	**Housing and Settlement Infrastructures**						
1	**Data collection and preparation for the channelling of the housing construction assistance and establishment of Community Groups (20-25 households/groups)**	Data collection on land and building ownership status, and suitability to the spatial plan	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Provision of extension services for safe rubble removal at settlement areas	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman,	√			**Government funding*) supported by community**

			West Pasaman, South Pesisir				
		Provision of simple rubble clearing and recycling tools	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Provision of transitional shelter and clean water + sanitation facilities for severely damaged houses	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Provision basic necessities/food assistance	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
2	**Housing construction and provision of rehabilitation and reconstruction clinics**	Provision of facilitator for community empowerment/training for housing and settlement infrastructures construction	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Provision of technical services to the community*) including IMB (Building Permit)	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**

		Channelling of earthquake resistant housing construction stimulus	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir				**Government funding*) supported by community**
		Provision of technical support for equipment and operation of information and monitoring system for construction quality and progress	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
3	**Settlement Infrastructures Construction**	Training on participatory planning and group establishments	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Planning and arrangement of settlements in accordance with spatial plan	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Provision of clean water and sanitation facilities	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Repair of settlement facilities: mosque,	Cities of Padang, Pariaman, Solok,				**Government funding*)**

		village hall, prayer hall, roads etc	Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**supported by community and private funds**
		Provision of medical equipment in accordance with secondary public health centre standards	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Technical assistance for settlement security evaluation	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir		√		**Government funding*) supported by community**
4	**Housing and settlement infrastructure relocation from disaster prone areas**	Socialisation of relocation concept to the community	Districts of Padang Pariaman, Agam		√		**Government funding*) supported by community**
		Provision of transitional shelter and facilities	**TBD**	√			**Government funding*) supported by community**
		Provision of housing construction stimulus	**TBD**	√	√		**Government funding*) supported by community**
		Construction of settlement infrastructures	**TBD**		√		**Government funding*) supported by community**
II	**PUBLIC INFRASTRUCTURES**						
1	**Roads and bridges**	Rehabilitation and	Cities of Padang,				**Full government**

		reconstruction of national, provincial, district/municipality roads and bridges	Pariaman, Solok, Padang Panjang, Tanah Datar Districts of Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir		√		**funding*)**
2	**Energy**	Housing connection repair	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir		√		PLN (State Electricity Company)
		Repair and provision of electricity services for government offices and public buildings	Cities of Padang, Pariaman, Solok, Padang Panjang, Districts of Tanah Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir		√	√	PLN
3	**Telecommunicatio n**	Repair and provision of electricity services for government offices and public buildings	South Pesisir District		√	√	PT. POS (Indonesian Post)
4	**Land transportation terminal**	Repair of terminal facilities ad infrastructures	Padang City		√		**Full government funding*)**
5	**Dock and port terminal**	Repair of dock facilities and infrastructures	Padang City, Mentawai Archipelago, South Pesisir		√		**Full government funding*)**
		Repair of port facilities and infrastructures	Padang City, Mentawai Archipelago, South Pesisir		√		**Full government funding*)**
6	**Clean Water**	Repair of production facilities	Padang City, Padang Pariaman,		√		PDAM (Regional Water Utility)

			Agam, South Pesisir, Pasaman, West Pasaman, Tanah Datar				
		Repair of transmission and distribution pipes	Padang City, Padang Pariaman, Agam, South Pesisir, Pasaman, West Pasaman, Tanah Datar		√		PDAM
		Provision of services for government offices and public buildings	Padang City, Padang Pariaman, Agam, South Pesisir, Pasaman, West Pasaman, Tanah Datar		√	√	PDAM
		Tertiary distribution network and housing connection	Padang City, Padang Pariaman, Agam, South Pesisir, Pasaman, West Pasaman, Tanah Datar	√	√		PDAM
		Provision and operation of water truck	Padang City, Padang Pariaman, Agam, South Pesisir, Pasaman, West Pasaman, Tanah Datar	√			**PDAM supported by government*)**
		Provision of water reservoir	Padang City, Padang Pariaman, Agam, South Pesisir, Pasaman, West Pasaman, Tanah Datar	√			**PDAM supported by government*)**
		Provision and operation of generator	Padang City, Padang Pariaman, Agam, South Pesisir, Pasaman, West Pasaman, Tanah Datar	√			**PDAM supported by government*)**
4	**Natural Resources Infrastructures**	Repair of technical irrigation	Padang City, Pariaman, Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok,		√	√	**Full government funding*)**

			Pasaman, West Pasaman, South Pesisir				
		Repair of non-technical irrigation	Padang City, Pariaman, Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir		√	√	**Government funding*) supported by community**
		Repair of traditional irrigation	Padang City, Pariaman, Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Private/corporate supported by government*)**
III	**SOCIAL**						
1	**Health**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Repair of government hospitals	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South		√		**Government funding*) supported by community**

			Pesisir				
		Repair of private hospitals	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√	√	**Private/corporate supported by government*)**
		Repair and construction of Community Health Centres, Polyclinics, Secondary Community Health Centres and Village Polyclinics	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Strengthening of mother and child care	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Private/corporate supported by government*)**
		Provision of temporary medical services, including the prevention of post-disaster epidemy	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West	√			**Private/corporate supported by government*)**

			Pasaman, South Pesisir				
		Provision of medical equipment and medicines	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Provision of temporary medical waste treatment equipment	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Provision of medical and health extension services staff	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Provision of psychological trauma services and counselling	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok,	√	√	√	**Private/corporate supported by government*)**

			Pasaman, West Pasaman, South Pesisir				
2	**Education**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Repairs and constructions of government owned kindergarten, elementary school, secondary school, high school and special school infrastructures	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir		√		**Government funding*) supported by community**
		Repairs and constructions of private owned kindergarten, elementary school, secondary school, high school and special school infrastructures	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir		√	√	**Private/corporate supported by government*)**
		Provision of temporary learning	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago,	√			**Government funding*) supported by community**

			Agam, Solok, Pasaman, West Pasaman, South Pesisir				
		Provision of learning aids	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Provision of substitute and additional teachers	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√			**Government funding*) supported by community**
		Provision of counselling services for students and teachers psychological recovery	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Provision of life skills training package for children	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai	√	√		**Government funding*) supported by community**

			Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir				
3	**Religious Facilities**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Repair and construction of mosques, prayer halls, churches,viharas	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Private/corporate supported by government*)**
4	**Social Institutions**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman, Padang Panjang Districts of Padang Pariaman, Agam	√	√		**Government funding*) supported by community**
		Repair and construction of orphanage and technical Implementing Units of Ministry of Social Affairs	Padang City		√		**Government funding*) supported by community**
		Provision of temporary child care facilities and nursing homes	Cities of Padang, Pariaman, Padang Panjang Districts of Padang Pariaman,	√			**Private/corporate supported by government*)**

			Agam				
		Provision of training package for children and the elderly	Cities of Padang, Pariaman, Padang Panjang Districts of Padang Pariaman, Agam	√			**Private/corporate supported by government*)**
		Provision of clean water and sanitation facilities		√	√		**Government funding*) supported by community**
		Provision of health services and psychological trauma counselling		√	√		**Government funding*) supported by community**
IV	**PRODUCTIVE ECONOMY**						
1	**Agriculture**	Revitalisation of agricultural land productivity	Cities of Padang, Pariaman, Padang Panjang Districts of Padang Pariaman, Agam	√	√		**Government funding*) supported by community**
	Fishery	Repair and construction of Fish Auction Facility	Cities of Padang, Pariaman		√		**Government funding*) supported by community**
		Repair and construction of fish landing dock	Cities of Padang, Pariaman		√		**Government funding*) supported by community**
		Repair and construction of fish breeding facility	Cities of Padang, Pariaman South Pesisir District		√		**Government funding*) supported by community**
		Revitalisation of fish farms	Padang City Districts of Padang Pariaman, Agam	√	√		**Government funding*) supported by community**
		Provision of temporary Fish Auction Facility and storage	Cities of Padang, Pariaman	√	√		**Government funding*) supported by community**
		Provision of temporary fish landing dock	Cities of Padang, Pariaman	√	√		**Government funding*) supported by community**

		Provision of fishing equipment and improvement of fishery enterprises	Padang City Districts of Padang Pariaman, Agam	√	√	√	**Private/corporate supported by government*)**
		Provision of fingerlings	Padang City Districts of Padang Pariaman, Agam	√	√		**Government funding*) supported by community**
3	**Farming**	Rehabilitation of small/medium farm enterprises	Cities of Padang, Pariaman	√	√	√	**Private/corporate supported by government*)**
4	**Industry**	Rehabilitation and recovery of production capacity of industry and medium sized enterprises	Cities of Padang, Pariaman Districts of Padang Pariaman, Agam, South Pesisir	√	√	√	**Private/corporate supported by government*)**
		Assistance for the revitalisation of production equipment for micro and small enterprises	Cities of Padang, Pariaman Districts of Padang Pariaman, Agam, South Pesisir	√	√		**Government funding*) supported by community**
		Provision of capital scheme for micro and small enterprises	Cities of Padang, Pariaman Districts of Padang Pariaman, Agam, South Pesisir	√	√	√	**Government funding*) supported by community**
5	**Trade**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman Districts of Padang Pariaman, Agam, Solok, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Rehabilitation and reconstruction of government owned markets	Cities of Padang, Pariaman Districts of Padang Pariaman, Agam, Solok, West Pasaman, South Pesisir		√	√	**Government funding*) supported by community**
		Provision of temporary shelters as well as clean water and sanitation	Cities of Padang, Pariaman Districts of Padang Pariaman,	√	√		**Government funding*) supported by community**

		facilities	Agam, Solok, West Pasaman, South Pesisir				
		Provision of capital scheme for small trade enterprises	Cities of Padang, Pariaman Districts of Padang Pariaman, Agam, Solok, West Pasaman, South Pesisir	√	√	√	**Private/corporate supported by government*)**
6	**Tourism**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman	√	√		**Government funding*) supported by community**
		Building repair and construction	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman	√	√	√	Local Government assisted by Donor
		Restoration of artefacts and historic documents	Padang City	√	√	√	**Government funding*) supported by community**
7	**Hotel, Restaurants**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman	√	√	√	**Government funding*) supported by community**
		Building repair and construction (private owned)	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah Datar, Padang Pariaman	√	√	√	**Private/corporate supported by government*)**
V	**CROSS SECTOR**						
1	**Government Office**	Provision of rubble removal and clearance equipment	Cities of Padang, Pariaman Districts of Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Provision of temporary office and	Cities of Padang, Pariaman	√	√		**Government funding*)**

		equipment	Districts of Agam, Solok, Pasaman, West Pasaman, South Pesisir				**supported by community**
		Provision of genset	Cities of Padang, Pariaman Districts of Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√		**Government funding*) supported by community**
		Recovery of IT function and operation	Cities of Padang, Pariaman Districts of Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√	√	**Government funding*) supported by community**
		Strengthening of implementation and management capacities for rehabilitation and reconstruction	Cities of Padang, Pariaman Districts of Agam, Solok, Pasaman, West Pasaman, South Pesisir	√	√	√	**Government funding*) supported by community**
2	**Environment**	Technical assistance for the development of AMDAL (Environmental Impact Assessment) for rubble disposal and recycling sites	Cities of Padang, Pariaman Districts of Agam, Solok, Pasaman, West Pasaman, South Pesisir		√		**Government funding*) supported by community**
		Stabilisation and utilisation of slopes	Districts of Agam, Padang Pariaman		√	√	**Government funding*) supported by community**
		Landslide Mitigation at Maninjau Lake	Agam District		√	√	**Government funding*) supported by community**
		Forest and land conservation	Districts of Agam, Padang Pariaman, Tanah Datar, South Pesisir, Solok, Padang City		√	√	**Government funding*) supported by community**
		Post-earthquake rehabilitation and reconstruction AMDAL	Cities of Padang, Pariaman, Solok, Padang Panjang Districts of Tanah		√	√	**Government funding*) supported by community**

			Datar, Padang Pariaman, Agam, Solok, Pasaman, West Pasaman, South Pesisir				
		Improvement of environmental management capacity in rehabilitation and reconstruction	Agam District South Pesisir District, Padang City	√	√	√	**Government funding*) supported by community**
		Revitalisation of coastal resources	Agam District South Pesisir District, Padang City	√	√	√	**Government funding*) supported by community**
		Revitalisation of DAS (Watershed areas)	Districts of Agam, Padang Pariaman				
DISASTER RISK REDUCTION ACTIVITIES							
1	**Disaster Risk Reduction**	Revision and development of contingency plan and SOP	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Exercise and Simulation	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago,		√	√	**Government funding*) supported by community**

			Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir				
		Revision and development of disaster management plan	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Mapping of earthquake paths details	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**

		Public awareness campaign and education	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Monument construction in Tandike (landslide)	Agam District		√	√	**Government funding*) supported by community**
		Mapping of landslide prone details	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Regional spatial plan revision	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh,		√	√	**Government funding*) supported by community**

			Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darma sraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir				
		Strengthening of community institutional capacity	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darma sraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Communication system development	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darma		√	√	**Government funding*) supported by community**

			sraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir				
		Operational command centre development and strengthening	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Facilitation of BPBD establishment	Cities of Pariaman, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Development of multihazard early warning system	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang		√	√	**Government funding*) supported by community**

			Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir				
		Construction of Education and Training Centre and Depo	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South Solok, South Pesisir		√	√	**Government funding*) supported by community**
		Development of zoning and building code guidelines	Cities of Padang, Pariaman, Bukit Tinggi, Solok, Padang Panjang, Payakumbuh, Sawah Lunto Districts of Tanah Datar, Padang Pariaman, Mentawai Archipelago, Agam, Lima Puluh Kota,Solok,Darmasraya, Pasaman, West Pasaman, Sijunjung, South		√	√	**Government funding*) supported by community**

			Solok, South Pesisir				

CHAPTER VI

IMPLEMENTATION OF REHABILITATION AND RECONSTRUCTION

VI.1. FUNDING POLICY OF REHABILITATION AND RECONSTRUCTION

Funding for disaster management is regulated in Government regulation No. 22/2008 concerning Funding and Management of Disaster Aid. The disaster management fund covers the pre, during and/or post-disaster phases. The disaster management fund is the joint responsibility of the central and local governments. The fund originates from: a) APBN (State Budget), b) APBD (Local Budget); and/or c) the community. Disaster management funds sourced from APBN also provide disaster contingency fund, ready to use fund and social assistance fund (in the form of grants), which are implemented by the central and local governments, BNPB and/or BPBD in accordance with their main duties and functions. Pursuant to Government Regulation No. 22/2008, the planning, budgeting, implementation, financial administration and accountability of disaster management funds sourced from APBD (Province/District/Municipality) need to be adjusted with regulations on local financial management as follows:

1. Government Regulation No. 58/2005 concerning Local Financial Management;
2. Regulation of Minister of Home Affairs No. 13/2006 juncto No. 59/2007 concerning Guidelines for Local Financial Management;
3. Regulation of Minister of Home Affairs concerning Guidelines for Formulation of Local Budget (issued per fiscal year);
4. Other regulations related to the system and procedure of local financial management.

The funding for post-earthquake recovery in West Sumatera Province is targeted for the recovery components in the DaLA: a) Housing and settlement infrastructures, b) Public infrastructure, c) Social, d) Productive economy, and e) Cross-sector. Funding utilising stimulus approach in the form of grants is performed for community housing assistance and community economic assistance; while infrastructure recovery and technical assistance utilise mechanisms of development funding in accordance with applicable regulations and laws.

The main principles of the West Sumatera post-disaster rehabilitation and reconstruction funding policy is set forth in the Rehabilitation and Reconstruction Implementation Guidelines established by the Head of the National Agency for Disaster Management.

The housing stimulus funding policy is established with the following components:

1) Rp. 15 million for a severely damaged house, from APBN
2) Rp. 10 million for a moderately damaged house, from APBN
3) Rp. 1 million for a lightly damaged house, from APBD (District/Municipality)
4) Provision of technical and social facilitators
5) Provision of carpentry equipment
6) Community based development approach with reference to technical guidelines from Directorate General of Human Settlements, Department of Public Works.

The funding policy for the restoration of government owned facilities and infrastructures is established as follows:

1) Upon verification by the central and local governments, funds are provided for the restoration of government owned public, social, productive economy, and cross-sectoral facilities and infrastructures (including service recovery) damaged by the earthquake.
2) The funds are sourced from APBN and APBD respectively; including support from the community and international donors/institutions.

The funding policy for the productive economy stimulus is established as follows:

1) Direct financial assistance is provided to the disaster affected community in the agricultural, farming, fishery, service, trade, community based processing industry sectors, which are identified by the local government.
2) The funds are sourced from APBN and APBD respectively; including support from the community and international donors/institutions.

VI.1.1. REHABILITATION AND RECONSTRUCTION FUNDS OF CENTRAL AND LOCAL GOVERNMENTS

The planning and budgeting for post-disaster rehabilitation and reconstruction activities funded by APBN and APBD are performed in accordance with the provisions of regulations and laws. As a base for the formulation of RAPBN (state budget plan) and RAPBD (local budget plan), the central and local governments are required to develop RKP (Government Work Plan) and RKPD (Local Government Work Plan). The development of the Government Work Plan is performed through a coordinated discussion process (Central Coordination Meeting for RKP

Development and National Development Planning Convention/Musrenbang) involving Bappenas and all line ministries as well as the local government. The draft of the local government work plan is developed through a coordinated discussion process between Bappeda and all local government work units through local Musrenbang, producing an agreement among development actors on the draft of the government work plan and the local government work plan, which are subsequently put into RKA-KL (Line Ministry Work and Budget Plan) and RKA-SKPD (Work and Budget Plan of Local Government Work Unit) in accordance with applicable regulations and laws.

VI.1.1 Grants

Based on the procedure for the management of the Sumatera disaster management relief fund established by the Regulation of Minister of Finance, Sumatera Natural Disaster Relief accounts were opened at Bank of Indonesia to accommodate domestic as well as overseas financial assistance. The accounts are categorised as Other Accounts of the State Treasury as follows:

Table VI.1.
Accounts of Minister of Finance for Sumatera Disaster Relief

No	Account Name	Account No.	Detail
1	Rupiah Account of Minister of Finance for Sumatera Disaster Relief	519.000123	For grants in Rupiah and currencies other than USD, EURO and JPY.
2	USD Account of Minister of Finance for Sumatera Disaster Relief	609.022411	For USD grants
3	EURO Account of Minister of Finance for Sumatera Disaster Relief	609.000991	For EURO grants
4	JPY Account of Minister of Finance for Sumatera Disaster Relief	609.007111	For JPY grants

The Sumatera Natural Disaster Relief accounts may only be utilised for natural disaster management activities in Sumatera and its surrounding areas. The funds are utilised through the state budget mechanism with Minister of Finance as the Budget User and First Secretary of the National Agency for Disaster Management as the Budget Owner. A total of Rp. 480 billion was received from various sources per 23 October 2009.

Apart from revenues from the above accounts, international aid may also be obtained through West Sumatera Multi Donor Funds scheme, which will be established further by the government.

Multilateral and bilateral donors who committed funding support are as follows:

Table VI.2.
Estimated relief funds from multilateral and bilateral sources

No.	Source	Commitment (million)	Status	Executing Agency
1	The World Bank			
	UPP (Urban Poverty Project)/Urban PNPM (National Programme for Community Empowerment)	USD 20-30	Reprogramming	Directorate General of Human Settlements, Department of Public Works
	KDP (Kecamatan/Sub-district Development Programme)/Rural PNPM	USD 17	Reprogramming	MOHA
	PAMSIMAS (Community Clean Water and Sanitation Programme)	USD 5	Reprogramming	Directorate General of Human Settlements, Department of Public Works
	ILGR	USD 3	Reprogramming	MOHA
	WASAP	USD 0,5-1	Reprogramming	The World Bank
	Early Childhood Education and Development	USD 1,5	Reprogramming	Ministry of National Education
	WINRIP	USD 6	Reprogramming	Directorate General of Highways, Department of Public Works
2	ADB			
	Asia Pacific Disaster Response Fund	USD 3		
	Project	USD 18-25	Reprogramming	
3	IDB	USD 30,5	Grant, soft loan and loan combinations	
4	UN-Family	USD 38,5	USD 14,5 M available	
5	UN-OCHA			
	Technical Assistance	In-kind		
	Emergency	USD 0,17		
6	UNDP			
	Technical Assistance	In-kind		
	RISE Project	USD 0,2		
7	UK Government			
	Emergency Response	£ 1,5		
	Project	£1,5		
8	AUSAID	AUD 12		
9	Germany	£0,75		
10	Government of Netherlands	£0,5		
11	Government of Japan		TBA	

Source: Bappenas, 29 October 2009.

VI.2. FUNDING NEEDS OF REHABILITATION AND RECONSTRUCTION

Based on the prioritised needs of the rehabilitation and reconstruction identified by the DaLA report (the recovery of housing and settlement, public, social and productive economy infrastructures and – in accordance with the inputs of the local government – disaster risk reduction), the funding needs for the West Sumatera post-disaster recovery are as follows:

Table VI.3.
Recapitulation of Rehabilitation and Reconstruction Funding Needs

No	SECTOR/SUBSECTOR	Assessed Needs		Share			
		West Sumatera		Government		Private	
		(million Rupiah)	(%)	(million Rupiah)	(%)	(million Rupiah)	(%)
1	Housing	3.165.518,18	49,33			3.165.518,18	92,05
2	Infrastructure	661.935,20	10,32	578.046,92	19,41	83.888,28	2,44
3	Social	1.268.176,02	19,76	1.268.176,02	42,58		
4	Economy	189.433,43	2,95	5.697,00	0,19	183.736,43	5,34
5	Cross Sector	1.097.387,18	17,10	1.091.528,18	36,65	5.859,00	0,17
6	Disaster Risk Reduction	34.650,00	0,54	34.650,00	1,16		
Total		**6.417.100,00**	**100,00**	**2.978.098,12**	**100,00**	**3.439.001,88**	**100,00**

The identified funding needs are initial estimation based on planning assumptions. Funding needs for physical reconstructions require further technical planning and valuations based on the scale of damage and technical requirements of the respective sectors. Non-physical recovery - such as housing stimulus and community housing stimulus - require data of beneficiaries and the types of the required interventions as feedbacks to formulate intervention and funding policies (including the channelling mechanism) for the community assistance.

VI.3. FUNDING MECHANISM OF REHABILITATION AND RECONSTRUCTION

1. Rehabilitation and Reconstruction Funds of the Central and Local Governments

Line ministries perform rehabilitation and reconstruction programmes according to their main duties and functions through the state budget mechanism, including Deconcentration and Assistance Task. Provincial/District/Municipality Government Work Units implement rehabilitation and reconstruction programme according to their main duties and functions through the local budget mechanism.

2. Housing, Social and Economic Grants

The channelling of assistance to the community is performed concurrently with the housing recovery in order to improve effectiveness. Based on the Guidelines for the Implementation of Rehabilitation and Recovery established by the Head of the National

Agency for Disaster Management, the procedures for the direct assistance to the community are as follows:

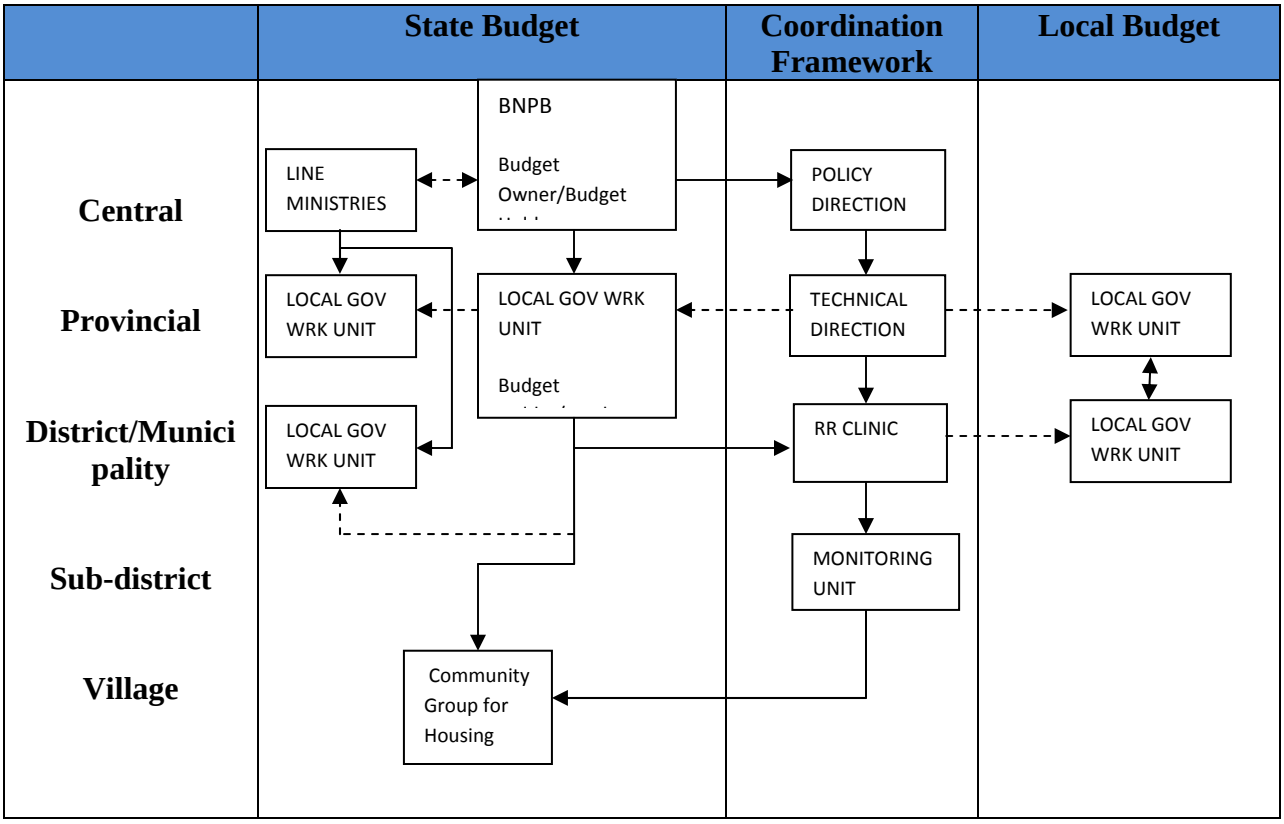
a) Housing assistance is channelled through Community Groups.
b) Social and productive economic assistance are coordinated by BNPB and West Sumatera Provincial Government.
c) The allocation of funds sourced from the state budget is provided through an MoU between BNPB and the Regent/Mayor through the Governor of West Sumatera and subsequently transferred to the relevant Local Government Work Unit.

VI.3. INSTITUTIONAL ARRANGEMENT FOR THE IMPLEMENTATION OF REHABILITATION AND RECONSTRUCTION

Rehabilitation and reconstruction immediately commences following the government's announcement of the end of the emergency response phase. Provided that the function of the local government is not affected by the 30 September 2009 disaster, the implementation of the West Sumatera rehabilitation and reconstruction shall be performed by the provincial government under BNPB's coordination.

Through BNPB, the government has the duty to provide policy direction, West Sumatera Provincial Government has the duty to provide technical directions (operational guidelines), while the district/municipality government has the duty to perform rehabilitation and reconstruction according to the operational guidelines developed by the West Sumatera Provincial Government. A rehabilitation and reconstruction clinic is established at the district/municipality level as a coordination forum among SKPDs (Local Government Work Units) as well as a service to the community, while a monitoring unit is established at the sub-district level to ensure accurate and accountable recovery and fund channelling.

Figure VI.1.
Coordination Mechanism for Rehabilitation



In the event that the local government requires capacity support for the implementation of the rehabilitation and reconstruction, a technical team may be established at the central level. The team is coordinated by BNPB and has the task of providing technical assistance to the local government in the implementation of the rehabilitation and reconstruction. The institutional and duty structures of the team are subsequently established by the central government.

VI. LOGISTICS FOR THE IMPLEMENTATION OF REHABILITATION AND RECONSTRUCTION

The implementation of rehabilitation and reconstruction needs to be performed in a systematic, integrated and coordinated manner in ensuring that repairs of facilities and infrastructures are performed effectively and efficiently in compliance with applicable provisions. Due to the significant scale of the post-disaster recovery, the following measures need to be undertaken:

1. The local government inventorises sources of primary building materials (cement, steel and wood);

2. The local government anticipates measures needed to facilitate the procurement of building materials for traditional houses to guarantee availability;
3. The local government needs to provide a Logistical Depo to guarantee the continuity of the supply chain in accordance with the distribution of the damage areas;
4. In the event that the procurement of goods and services is needed, the Procurement Committee shall be from a government technical agency, as regulated in Regulation of the President of the Republic of Indonesia No. 70/2005 juncto Presidential Decree No. 80/2003 concerning Guidelines for the Procurement of Goods and Services for the Government along with the amendments;
5. Local providers of goods/services have the opportunity to participate competitively for the rehabilitation work;
6. The management of the procurement of public goods and services for rehabilitation is the responsibility of the Head of the Local Government Work Unit implementing the procurement.
7. Aspects related to immigration, tax, import duties, quarantines and others are regulated further by the Regulation of Minister of Finance.

VI.5. MONITORING AND EVALUATION FOR THE IMPLEMENTATION OF REHABILITATION AND RECONSTRUCTION

Monitoring of the implementation of the disaster management is intended to serve as a control measure for the rehabilitation and reconstruction process, while evaluation is performed to ensure the achievement of minimum standards of service and the improvement of the disaster management performance. The National Development Planning System mandated by Law No. 25/2004 is a series of development planning procedures used to produce long term, medium term and annual development plans implemented by the executing elements of the state and the community at the central as well as local levels. The planning phases consist of : a) plan formulation, b) plan endorsement, c) plan implementation, and d) performance evaluation.

The procedure for the management and evaluation APBN funded development plan is regulated in Government Regulation No. 39/2006. Reporting is an inseparable part of the monitoring and evaluation as illustrated in the following table:

Table VI.4.
Reporting mechanism for the monitoring and evaluation of APBN funding

Type of Report	Reporting Period	Reporting Party	Report Recipient	CC
Report for the implementation of development plan of line ministries	Quarter	a. Person in charge of the activity (Head of Work Unit) b. Person in charge of the programme (Organisation Head of Unit)	a. Person in charge of the programme (Organisation Head of Unit) b. Minister/Head of Non-Department Government	Head of Local Development Planning Agency at the activity location

		c. Ministers/Heads of Institutions	Institution c. Ministers of Planning, Finance and Civil Service	
Report for the implementation of Deconcentration Fund at Provincial Government Work Unit	Quarter	a. Person in charge of the activity b. Person in charge of the programme c. Head of Local Government Work Unit d. Head of Bappeda (Provincial Development Planning Agency)	a. Person in charge of the programme b. Head of Local Government Work Unit c. Minister/Head of Non-Department Government Institution and Head of Provincial Development Planning Agency d. Ministers of Planning, Finance and Home Affairs	
Report for the implementation of Assistance Fund at District/Municipality Government Work Units	Quarter	a. Person in charge of the activity b. Person in charge of the programme c. Head of Local Government Work Unit d. Head of Bappeda (District/Municipality Development Planning Agency)	a. Person in charge of the programme b. Head of Local Government Work Unit c. Minister/relevant Head of Institution and Head of District/Municipality Development Planning Agency d. Head of Provincial Development Planning Agency	Head of Provincial Government Work Unit having the same task and authority

Source: Government Regulation No. 39/2006

Funding sourced from the local budget is governed by Regulation of Minister of Home Affairs No. 13/2006 concerning Local Finance and Regulation of Minister of Home Affairs No. 55/2008 concerning Procedure for the Administration and Formulation of Treasury Report and its Submission, with reference to Article 31 Paragraph 4 of Government Regulation No. 8/2006 concerning Performance and Financial Reporting of Government Agencies which reads, "Further provisions for the administration and formulation of treasury report and its submission is regulated in the Regulation of Minister of Finance for the central government level, and by Governor/Regent/Mayor Regulation - with reference to the guidelines established by Minister of Home Affairs – for the local government level."

The financial and performance reporting of government agencies are regulated in Government Regulation No. 8/2006, with reference to Law No. 1/2004 concerning State Treasury, Law No. 32/2004 concerning Local Government and Law No. 33 concerning Financial Balance between the Central Government and Local Government. The financial report is a form

of accountability for the management of state/local finance for one period, whereas Performance Report is a summary briefly and thoroughly describing achievements based on the work plans established in the implementation of APBN/APBD. Principally, the Financial Report and the Performance Report must show that the inputs (mobilisation of human, equipment and funding resources) are consistent with the outputs (in the form of goods and services) and measurable performance indicators. The detailed mechanisms for the Financial and Performance Reports of the Central, Provincial and District/Municipality Governments are regulated in Government Regulation No. 8/2006. This regulation include supervisory and control efforts with reference to applicable regulations and laws.

Control on the participation of the business and international communities shall be administered with reference to Government Regulation No. 2/2006, Government Regulation No. 23/2008 and implementation guidelines issued by Minister of Finance.

The following 5 indicators will be used to evaluate the implementation of the rehabilitation and reconstruction:

1. **Consistency** of the policy implementation and recovery strategy, prioritised activities and funding with the Rehabilitation and Reconstruction Action Plan;
2. **Coordination** among the central government, the local government and the community, creating synchronised planning and budgeting;
3. Public participation through **consultation** mechanism;
4. **Capacity** of the executing agency in the planning and implementation of the rehabilitation, assessed through financial and performance reports; as well as the capacity of the central and local governments in the implementation of the disaster management;
5. The potential for **sustainability** in the framework of medium term and long term development.

The monitoring and evaluation of the rehabilitation and reconstruction are performed by the National Development Planning Agency and the National Agency for Disaster Management.

VI.6. EXIT TRANSITION AND SUSTAINABILITY OF RECOVERY

Considering that the rehabilitation and reconstruction are performed for 2 fiscal years, the following measures are needed to facilitate the transition from post-disaster recovery into regular development process:

VI.6.1. MANAGEMENT OF REHABILITATION AND RECONSTRUCTION ASSETS

During the exit transition, the management of state/local government owned assets needs to be observed in accordance with Government Regulation No. 6/2006, including transfer of assets from the central government to the local government and vice versa, among local

governments, or from central/local government to other parties, for instance government funded community housing. The procedure for utilisation, cancellation and transfer of the state owned assets must comply with Regulation of Minister of Finance No. 96/PMK.06/2007.

Assets constructed by the international community are managed by the central government, while domestic contributions are managed by the local government in accordance with further provisions regulated in the Regulations of Minister of Finance and Minister of Home Affairs. In order to assist Minister of Finance, the executing agent of the rehabilitation and reconstruction may:

1. request information, data and documents needed for the completion of tasks from line ministries and local government agencies;
2. undertake necessary cooperations with government agencies and/or other parties (within its authority and in accordance with applicable provisions); and
3. request for studies or assistance from experts and practitioners in the relevant field.

VI.6.2. EXIT TRANSITION

Nearing the exit transition, the executing agent of the rehabilitation and reconstruction is required to provide information to the central government on:

1. the state financial/asset documents as well as non-state financial/assets documents, along with the management systems;
2. the continuity of the implementation of Construction in Progress and non-construction project funded by APBN as well as non-government which have not been completed during the exit transition;
3. the status of civil and state administration cases which have not been settled;
4. the status of the legal certification process of public lands and housing relocations constructed by the government as well as other parties;
5. the payment status of due tax and import duties; and
6. actions that have been and/or need to be performed to follow up on findings of the Internal Supervisory Unit of the Government as well as the State Financial Audit Board.

VI.6.3. SUSTAINABILITY OF POST-REHABILITATION AND RECONSTRUCTION RECOVERY

The exit strategy of the executing agent of the rehabilitation and reconstruction must be formulated according to the planning and budgeting cycles in order to ensure sustainable operation and maintenance of assets in accordance with the authority of the institution based on

applicable regulations and laws. Pursuant to Law 24/2007, in the absence of a disaster and in a disaster potential situation, the local government is mandated to:

1. Undertake planning for disaster management by identifying and studying disaster potential, analysing disaster risk, analysing local and community vulnerability and capacity for disaster management, identifying actions for disaster risk reduction and developing DM Plan and DRR Local Action Plan;
2. Reduce disaster risk by implementing disaster mitigation based spatial planning and mainstreaming disaster risk reduction into the RPJMD (Local Medium Term Development Plan), RKPD (Local Government Work Plan), RKA-SKPD (Work and Budget Plan of Local Government Work Unit) and RTRW (Regional Spatial Plan);
3. Conduct studies, education and training on disaster management and preparedness by integrating disaster risk reduction component into the formal and informal educational system and providing extension services and training to communities at disaster prone areas.
4. Establish Local Disaster Management Agency at disaster prone provinces and districts/municipalities in accordance with Regulation of Minister of Home Affairs No. 46/2008 concerning Guidelines on Organisation and Procedure of Local Disaster Management Agency and Regulation of Head of the National Agency for Disaster Management No. 3/2008 concerning Guidelines for the Establishment of Local Disaster Management Agency.

    a. Allocate adequate funds for disaster management from the local budget.
    b. Based on the disaster potential, undertake disaster risk reduction and prevention as well as manage the regional spatial utilisation through construction permit mechanism and compliance to technical requirements in accordance with the relevant authority.

LAMPIRAN

Rekapitulasi Identifikasi Kebutuhan

NO	SEKTOR/ SUBSEKTOR	Nilai Kebutuhan		Kepemilikan			
		Sumatera Barat		PEMERINTAH		SWASTA	
		(Rp Juta)	(%)	(Rp Juta)	(%)	(Rp Juta)	(%)
1	**PERUMAHAN**	**3.278.242,61**		**-**		**3.278.242,61**	
	1 Perumahan	2.987.421,31				2.987.421,31	
	2 Prasarana Permukiman	290.821,29				290.821,29	
2	**INFRASTRUKTUR**	**553.935,20**		**470.046,92**		**83.888,28**	
	1 Transportasi	411.192,20		411.192,20			
	2 Energi	-				-	
	3 Pos dan Telekomunikasi	-				-	
	4 Air dan Sanitasi	83.888,28				83.888,28	
	5 Infrastruktur Sumber Daya Air	58.854,72		58.854,72			
3	**SOSIAL**	**1.268.176,02**		**1.268.176,02**		**-**	
	1 Kesehatan	329.794,00		329.794,00			
	2 Pendidikan	627.603,39		627.603,39			
	3 Agama	294.967,08		294.967,08			
	4 Lembaga Sosial	15.811,56		15.811,56			
4	**EKONOMI**	**189.433,43**		**5.697,00**		**183.736,43**	
	1 Pertanian	15.861,88				15.861,88	
	2 Perikanan	6.112,55		3.420,00		2.692,55	
	3 Peternakan	5.904,00				5.904,00	
	4 Perindustrian	125.600,00				125.600,00	
	5 Perdagangan	2.277,00		2.277,00			
	6 Pariwisata	33.678,00				33.678,00	
5	**LINTAS SEKTOR**	**1.093.662,75**		**1.087.803,75**		**5.859,00**	
	1 Lingkungan Hidup	**169.625,00**		169.625,00			
	2 Pemerintahan	918.178,75		918.178,75			
	3 Keuangan dan Perbankan	5.859,00				5.859,00	
6	**PENGURANGAN RISIKO BENCANA**	**33.650,00**		**33.650,00**			
	1 Pengurangan Risiko Bencana	33.650,00		33.650,00			
TOTAL		**6.417.100,00**		**2.865.373,69**		**3.551.726,31**	

Perumahan

Sektor / Sub Sektor		Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
				Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
PERUMAHAN										2.149.201,56	722.205,43	72.013,98	3.278.242,61	
1	Perumahan	A. Perumahan		114.483	67.182	68.913				1.946.212,70	671.819,00	68.912,90	2.987.421,31	
		Rumah	Kota Padang	33.597	35.816	37.615	Unit			503.955,00	358.160,00	37.615,00	899.730,00	Data Verifikasi BNPB
			Kota Pariaman	6.514	3.960	2.931	Unit			97.710,00	39.600,00	2.931,00	140.241,00	
			Kota Solok	2	2	6	Unit			30,00	20,00	6,00	56,00	
			Kota Padang Panjang	17	164	413	Unit			255,00	1.640,00	413,00	2.308,00	
			Kab. Tanah Datar	28	115	105	Unit			420,00	1.150,00	105,00	1.675,00	
			Kab. Padang Pariaman	57.788	16.430	13.694	Unit			866.820,00	164.300,00	13.694,00	1.044.814,00	
			Kab. Kepulauan Mentawai	3	-	136	Unit			45,00	-	136,00	181,00	
			Kab. Agam	11.796	3.797	4.353	Unit			176.940,00	37.970,00	4.353,00	219.263,00	
			Kab. Solok	145	243	357	Unit			2.175,00	2.430,00	357,00	4.962,00	
			Kab. Pasaman	197	13	931	Unit			2.955,00	130,00	931,00	4.016,00	
			Kab. Pasaman Barat	3.240	3.046	2.862	Unit			48.600,00	30.460,00	2.862,00	81.922,00	
			Kab. Pesisir Selatan	1.156	3.596	5.510	Unit			17.341,50	35.959,00	5.509,90	58.810,40	
													-	
		Hunian Transisi							2,00	228.966,20			228.966,20	
		Penyediaan lahan relokasi												
		Jadup		114.483				60	0,019	130.510,73			130.510,73	asumsi: KK=4orang=19 ribu
													-	
		Pelayanan teknis pemulihan perumahan											-	
													-	
		Bantuan pendampingan tenaga teknis											169.965,98	PNPM Pedesaan USD 17juta
													-	
		Bantuan peralatan dan teknologi												
		Bantuan sistem informasi pemantauan												
		B. Prasarana Permukiman		114.483	67.182	68.913				202.988,86	50.386,43	3.101,08	290.821,29	
		Prasaran Permukiman	Kota Padang	33.597	35.816	37.615				75.593,25	26.862,00	1.692,68	104.147,93	
			Kota Pariaman	6.514	3.960	2.931				10.259,55	2.970,00	131,90	13.361,45	
			Kota Solok	2	2	6				3,15	1,50	0,27	4,92	
			Kota Padang Panjang	17	164	413				26,78	123,00	18,59	168,36	
			Kab. Tanah Datar	28	115	105				44,10	86,25	4,73	135,08	
			Kab. Padang Pariaman	57.788	16.430	13.694				91.016,10	12.322,50	616,23	103.954,83	
			Kab. Kepulauan Mentawai	3	-	136				4,73	-	6,12	10,85	
			Kab. Agam	11.796	3.797	4.353				18.578,70	2.847,75	195,89	21.622,34	
			Kab. Solok	145	243	357				228,38	182,25	16,07	426,69	
			Kab. Pasaman	197	13	931				310,28	9,75	41,90	361,92	
			Kab. Pasaman Barat	3.240	3.046	2.862				5.103,00	2.284,50	128,79	7.516,29	
			Kab. Pesisir Selatan	1.156	3.596	5.510				1.820,86	2.696,93	247,95	4.765,73	
		Penyediaan PLP (Relokasi)												
		Air dan Sanitasi Hunian Transisi								34.344,93			34.344,93	15% dari kebutuhan hunsisi

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Infrastruktur

Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
INFRASTRUKTUR									294.970,28	166.686,97	92.277,95	553.935,20	
1. Transportasi	A. Transportasi Darat								173.125,00	147.981,25	87.835,95	408.942,20	
	Jalan Nasional	Kota Padang	4.667	-	-	meter			9.334,00	-	-	9.334,00	Data PU Kabupaten/Kota
		Kota Pariaman	-	-	-	meter			-	-	-	-	
		Kota Solok	-	-	-	meter			-	-	-	-	
		Kota Padang Panjang	-	-	-	meter			-	-	-	-	
		Kab. Tanah Datar	2.104	-	-	meter			4.208,00	-	-	4.208,00	
		Kab. Padang Pariaman	1.796	-	-	meter			3.592,00	-	-	3.592,00	
		Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
		Kab. Agam	1.261	1.540	-	meter			2.522,00	2.695,00	-	5.217,00	
		Kab. Solok	-	-	-	meter			-	-	-	-	
		Kab. Pasaman	-	-	-	meter			-	-	-	-	
		Kab. Pasaman Barat	-	-	-	meter			-	-	-	-	
		Kab. Pesisir Selatan	-	-	-	meter			-	-	-	-	
									-	-	-	-	
	Jalan Provinsi	Kota Padang	-	-	-	meter			-	-	-	-	
		Kota Pariaman	-	-	-	meter			-	-	-	-	
		Kota Solok	-	-	-	meter			-	-	-	-	
		Kota Padang Panjang	-	-	-	meter			-	-	-	-	
		Kab. Tanah Datar	-	265	-	meter			-	463,75	-	463,75	
		Kab. Padang Pariaman	1.171	-	-	meter			2.342,40	-	-	2.342,40	
		Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
		Kab. Agam	61	-	-	meter			122,00	-	-	122,00	
		Kab. Solok	2.180	-	-	meter			4.360,00	-	-	4.360,00	
		Kab. Pasaman	-	-	-	meter			-	-	-	-	
		Kab. Pasaman Barat	135	-	-	meter			270,00	-	-	270,00	
		Kab. Pesisir Selatan	35	-	-	meter			70,00	-	-	70,00	
									-	-	-		
	Jalan Kabupaten/Kota	Kota Padang	14.750	21.300	-	meter			29.500,00	37.275,00	-	66.775,00	
		Kota Pariaman	-	3.580	-	meter			-	6.265,00	-	6.265,00	
		Kota Solok	-	-	30	meter			-	-	40,50	40,50	
		Kota Padang Panjang	-	400	-	meter			-	700,00	-	700,00	
		Kab. Tanah Datar	-	5.230	-	meter			-	9.152,50	-	9.152,50	
		Kab. Padang Pariaman	3.685	16.170	51.845	meter			7.370,00	28.297,50	69.990,75	105.658,25	
		Kab. Kepulauan Mentawai	-	-	7.500	meter			-	-	10.125,00	10.125,00	
		Kab. Agam	15.200	23.500	-	meter			30.400,00	41.125,00	-	71.525,00	
		Kab. Solok	-	-	-	meter			-	-	-	-	
		Kab. Pasaman	398	-	-	meter			795,60	-	-	795,60	
		Kab. Pasaman Barat	-	-	-	meter			-	-	-	-	
		Kab. Pesisir Selatan	18.750	2.900	1.200	meter			37.500,00	5.075,00	1.620,00	44.195,00	
												-	
	Jembatan Nasional	Kota Padang	35	90	-	meter			70,00	157,50	-	227,50	
		Kota Pariaman	-	-	-	meter			-	-	-	-	
		Kota Solok	-	-	-	meter			-	-	-	-	
		Kota Padang Panjang	-	-	-	meter			-	-	-	-	
		Kab. Tanah Datar	-		-	meter			-	-	-	-	
		Kab. Padang Pariaman	562	-	-	meter			1.124,00	-	-	1.124,00	
		Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
		Kab. Agam	-	-	-	meter			-	-	-	-	
		Kab. Solok	-	-	-	meter			-	-	-	-	
		Kab. Pasaman	-	-	-	meter			-	-	-	-	
		Kab. Pasaman Barat	75	-	-	meter			150,00	-	-	150,00	
		Kab. Pesisir Selatan	-	-	-	meter			-	-	-	-	
										-	-	-	
	Jembatan Provinsi	Kota Padang	-	-	-	meter			-	-	-	-	

Infrastruktur

Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
		Kota Pariaman	-	-	-	meter			-	-	-	-	
		Kota Solok	-	-	-	meter			-	-	-	-	
		Kota Padang Panjang	-	-	-	meter			-	-	-	-	
		Kab. Tanah Datar	-	-	-	meter			-	-	-	-	
		Kab. Padang Pariaman	258	-	-	meter			515,00	-	-	515,00	
		Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
		Kab. Agam	-	-	-	meter			-	-	-	-	
		Kab. Solok	-	-	-	meter			-	-	-	-	
		Kab. Pasaman	-	-		meter			-	-	-	-	
		Kab. Pasaman Barat	-	-	22	meter			-	-	29,70	29,70	
		Kab. Pesisir Selatan				meter			-	-	-	-	
	Jembatan Kabupaten	Kota Padang	8	13	2	Unit		300,00	2.400,00	1.950,00	180,00	4.530,00	
		Kota Pariaman	1		12	Unit		300,00	300,00	-	1.080,00	1.380,00	
		Kota Solok	-	1	-	Unit		300,00	-	150,00	-	150,00	
		Kota Padang Panjang	-	-	-	Unit		300,00	-	-	-	-	
		Kab. Tanah Datar	-	-	-	Unit		300,00	-	-	-	-	
		Kab. Padang Pariaman	99	90	46	Unit		300,00	29.700,00	13.500,00	4.140,00	47.340,00	
		Kab. Kepulauan Mentawai	3		1	Unit		300,00	900,00	-	90,00	990,00	
		Kab. Agam	2	3	-	Unit		300,00	600,00	450,00	-	1.050,00	
		Kab. Solok	-	-	-	Unit		300,00	-	-	-	-	
		Kab. Pasaman	-	-	2	Unit		300,00	-	-	180,00	180,00	
		Kab. Pasaman Barat	-	-	4	Unit		300,00	-	-	360,00	360,00	
		Kab. Pesisir Selatan	6	2	-	Unit		300,00	1.800,00	300,00	-	2.100,00	
	Drainase	Kota Padang	-	-	-	meter			-	-	-	-	
		Kota Pariaman	180	850	-	meter		1,00	180,00	425,00	-	605,00	
		Kota Solok	-	-	-	meter			-	-	-	-	
		Kota Padang Panjang	-	-	-	meter			-	-	-	-	
		Kab. Tanah Datar	-	-	-	meter			-	-	-	-	
		Kab. Padang Pariaman	-	-	-	meter			-	-	-	-	
		Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
		Kab. Agam	-	-	-	meter			-	-	-	-	
		Kab. Solok	-	-	-	meter			-	-	-	-	
		Kab. Pasaman	-	-	-	meter			-	-	-	-	
		Kab. Pasaman Barat	-	-	-	meter			-	-	-	-	
		Kab. Pesisir Selatan	-	-	-	meter			-	-	-	-	
												-	
	g. Terminal	Kota Padang	1			Unit	1000	3,00	3.000,00			3.000,00	
												-	
	h. Stasiun Kereta Api											-	
												-	
	i. Rel Kereta Api	Kota Padang	800	18	500	meter						-	
												-	
	j. Depo											-	
	B. Transportasi Laut								750,00	1.500,00	-	2.250,00	
	a. Dermaga	Kota Padang	1			Unit			750,00			750,00	Pemkab
		Kab. Kepulauan Mentawai		1		Unit			-	500,00	-	500,00	
		Kab. Pesisir Selatan		1		Unit			-	500,00	-	500,00	
	Peralatan dan Perlengkapan												

Infrastruktur

Sektor / Sub Sektor		Sarana dan Prasarana			Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
						Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
			b.	Terminal Pelabuhan	Kab. Kepulauan Mentawai		1		Unit			-	500,00	-	500,00	
				Peralatan dan Perlengkapan												
			c.	Kapal												
			d.	Navigasi Pelayaran												
		C. Transportasi Udara										-	-	-	-	
			a.	Landasan Pacu												
			b.	Air Traffic Control												
			c.	Terminal Penumpang												
			d.	Peralatan dan Perlengkapan												
			e.	Pesawat												
2.	Energi	A. Bahan Bakar										-	-	-	-	
				- SPBU												
				- Depo Bahan Bakar												
				- Jaringan Distribusi												
				- Pendapatan												
		B. Listrik										-	-	-	-	
				- Jaringan Utama												
				- Gardu Induk												
				- Gardu Pembangkit												
				- Kantor Pelayanan Listrik												
				- Jaringan Distribusi												
				- Sambungan Listrik Pelanggan												
3.	Pos dan Telekomunikasi											-	-	-	-	
			a.	Telkom												
				- Bangunan dan Gedung												
				- Jaringan Utama Telekomunikasi												
				- Kantor Pelayanan												
				- Jaringan Distribusi												
				- Sambungan Pelanggan												
			b.	Radio												
				- Bangunan dan Gedung												
				- Jaringan Utama Radio												
			c.	Televisi												
				- Bangunan dan Gedung												
				- Jaringan Utama Pemancar												
			d.	Kantor Pos	Kab. Pesisir Selatan			1								
4.	Air dan Sanitasi	PDAM										80.646,28	-	3.242,00	83.888,28	
				Fasilitas Produksi	Kota Padang	1			Unit			68.000,00			68.000,00	Data WB
					Kab. Padang Pariaman	4	14	6	Unit					872,00	872,00	

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Sektor / Sub Sektor		Sarana dan Prasarana			Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
						Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
				Kab. Agam		1		5	Unit					350,00	350,00	
				Kab. Pesisir Selatan				3	Unit					1.220,00	1.220,00	
				Kab. Pasaman Barat				4	Unit					800,00	800,00	
															-	
				Jaringan Pipa	Kota Padang	2			Unit						-	
					Kab. Padang Pariaman	4.295			meter		0,075	322,13	-	-	322,13	
					Kab. Agam	37.900			meter		0,075	2.842,50	-	-	2.842,50	
					Kab. Pesisir Selatan	8.682			meter		0,075	651,15	-	-	651,15	
					Kab. Pasaman	-			meter		0,075	-	-	-	-	
					Kab. Pasaman Barat	13.260			meter		0,075	994,50	-	-	994,50	
					Kab. Tanah Datar	2.000			meter		0,075	150,00	-	-	150,00	
															-	
				Jaringan Distribusi	Kota Padang	20.000			Unit		0,25	5.000,00	-	-	5.000,00	
					Kab. Padang Pariaman	5.900			Unit		0,25	1.475,00	-	-	1.475,00	
					Kab. Agam	1.452			Unit		0,25	363,00	-	-	363,00	
					Kab. Pesisir Selatan	932			Unit		0,25	233,00	-	-	233,00	
					Kab. Pasaman Barat	1.500			Unit		0,25	375,00	-	-	375,00	
				Distribusi Pelanggan												
				Penyediaan Air Bersih Keliling												
				Penyediaan Penampungan Air Bersih	Kab. Pasaman	1			Unit		30,00	30,00	-	-	30,00	
					Kab. Pesisir Selatan	7			Unit		30,00	210,00	-	-	210,00	
				Penyediaan dan Pengoperasian Generator												
5.	Infrastruktur Sumber Daya Air											40.449,00	17.205,72	1.200,00	58.854,72	
			a.	Irigasi Teknis	Kota Padang	1.288	87	-	meter			2.576,00	152,25	-	2.728,25	Data Pemkab/ko
					Kota Pariaman	275	280	-	meter			550,00	490,00	-	1.040,00	
					Kota Solok	-	-	-	meter			-	-	-	-	
					Kota Padang Panjang	-	2.622	-	meter			-	4.588,97	-	4.588,97	
					Kab. Tanah Datar	-	-	-	meter			-	-	-	-	
					Kab. Padang Pariaman	295	-	-	meter			590,00	-	-	590,00	
					Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
					Kab. Agam	2.400	650	-	meter			4.800,00	1.137,50	-	5.937,50	
					Kab. Solok	-	3	1	Unit		500,00	-	750,00	150,00	900,00	
					Kab. Pasaman	19	12	6	Unit		500,00	9.500,00	3.000,00	900,00	13.400,00	
					Kab. Pasaman Barat	8	6	1	Unit		500,00	4.000,00	1.500,00	150,00	5.650,00	
					Kab. Pesisir Selatan	5	5	-	Unit		500,00	2.500,00	1.250,00	-	3.750,00	
															-	
			b.	Irigasi Non-Teknis	Kota Padang	-	-	-	meter			-	-	-	-	
					Kota Pariaman	-	-	-	meter			-	-	-	-	
					Kota Solok	-	-	-	meter			-	-	-	-	
					Kota Padang Panjang	-	-	-	meter			-	-	-	-	
					Kab. Tanah Datar	11.217,50	-	-	meter			11.217,50	-	-	11.217,50	
					Kab. Padang Pariaman	410	-	-	meter			410,00	-	-	410,00	
					Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
					Kab. Agam	-	1.898		meter			-	1.423,50	-	1.423,50	
					Kab. Solok	-	-	-	meter			-	-	-	-	
					Kab. Pasaman	-	-	-	meter			-	-	-	-	
					Kab. Pasaman Barat	-	-	-	meter			-	-	-	-	
					Kab. Pesisir Selatan	5	3	-	Unit		200,00	1.000,00	300,00	-	1.300,00	

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Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
	c. Irigasi Sederhana	Kota Padang	70	-	-	meter			35,00	-	-	35,00	
		Kota Pariaman	-	-	-	meter			-	-	-	-	
		Kota Solok	-	-	-	meter			-	-	-	-	
		Kota Padang Panjang	-	-	-	meter			-	-	-	-	
		Kab. Tanah Datar	-	-	-	meter			-	-	-	-	
		Kab. Padang Pariaman	5.641	-	-	meter			2.820,50	-	-	2.820,50	
		Kab. Kepulauan Mentawai	-	-	-	meter			-	-	-	-	
		Kab. Agam	-	6.795	-	meter			-	2.038,50	-	2.038,50	
		Kab. Solok	-	-	-	meter			-	-	-	-	
		Kab. Pasaman	-	-	-	meter			-	-	-	-	
		Kab. Pasaman Barat	-	-	-	meter			-	-	-	-	
		Kab. Pesisir Selatan	9	23	-	Unit		50,00	450,00	575,00	-	1.025,00	
									-	-	-	-	
	a. Normalisasi Sungai	Kab. Pesisir Selatan	12			Unit							
	b. Pantai	Kab. Pesisir Selatan	1			Unit							
	c. Bendungan	Kota Padang	7	-	-	Unit							
		Kab. Agam	27	4		Unit							
	d. Bangunan Tanggul												
	e. Pintu Air	Kab. Agam	5										
	f. Rumah Mantri Jaga											-	

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Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
SEKTOR SOSIAL									616.249,38	232.596,00	153.000,75	1.268.176,02	
1. Kesehatan									118.654,88	98.100,00	77.643,00	329.794,00	
	a. Rumah Sakit Pemerintah	Kota Padang	1	1	2	Unit	10000	3,00	30.000,00	15.000,00	18.000,00	63.000,00	Data WB
		Kota Pariaman	-	-	1	Unit	5000	3,00	-	-	4.500,00	4.500,00	
		Kota Solok	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kota Padang Panjang	-	1	-	Unit	5000	3,00	-	7.500,00	-	7.500,00	
		Kab. Tanah Datar	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Padang Pariaman	-	1	-	Unit	5000	3,00	-	7.500,00	-	7.500,00	
		Kab. Kepulauan Mentawai	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Agam	-	1	-	Unit	5000	3,00	-	7.500,00	-	7.500,00	
		Kab. Solok	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Pasaman	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Pasaman Barat	-	1	-	Unit	5000	3,00	-	7.500,00	-	7.500,00	
		Kab. Pesisir Selatan	-	1	-	Unit	5000	3,00	-	7.500,00	-	7.500,00	
	Pembersihan Puing		1					62,44	62,44			62,44	
	b. Rumah Sakit Swasta	Kota Padang	3	4	10	Unit	5000	3,00	45.000,00	30.000,00	45.000,00	120.000,00	
		Kota Pariaman	1	-	-	Unit	5000	3,00	15.000,00	-	-	15.000,00	
		Kota Solok	-	-	1	Unit	5000	3,00	-	-	4.500,00	4.500,00	
		Kota Padang Panjang	-	1	-	Unit	5000	3,00	-	7.500,00	-	7.500,00	
		Kab. Tanah Datar	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Padang Pariaman	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Kepulauan Mentawai	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Agam	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Solok	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Pasaman	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Pasaman Barat	-	-	-	Unit	5000	3,00	-	-	-	-	
		Kab. Pesisir Selatan	-	-	-	Unit	5000	3,00	-	-	-	-	
	Pembersihan Puing		1					62,44	62,44			62,44	
	c. Puskesmas	Kota Padang	4	4	11	Unit	200	1,80	1.440,00	720,00	1.188,00	3.348,00	
		Kota Pariaman	2	3		Unit	200	1,80	720,00	540,00	-	1.260,00	
		Kota Solok	-	-	1	Unit	200	1,80	-	-	108,00	108,00	
		Kota Padang Panjang	-	1	-	Unit	200	1,80	-	180,00	-	180,00	
		Kab. Tanah Datar	1	1		Unit	200	1,80	360,00	180,00	-	540,00	
		Kab. Padang Pariaman	14	6	2	Unit	200	1,80	5.040,00	1.080,00	216,00	6.336,00	
		Kab. Kepulauan Mentawai	-	-	1	Unit	200	1,80	-	-	108,00	108,00	
		Kab. Agam	1	1	-	Unit	200	1,80	360,00	180,00	-	540,00	
		Kab. Solok	-	-	1	Unit	200	1,80	-	-	108,00	108,00	
		Kab. Pasaman	-	-	-	Unit	200	1,80	-	-	-	-	
		Kab. Pasaman Barat	1	5	1	Unit	200	1,80	360,00	900,00	108,00	1.368,00	
		Kab. Pesisir Selatan	1	1	4	Unit	200	1,80	360,00	180,00	432,00	972,00	
	d. Puskesmas Pembantu	Kota Padang	5	8	25	Unit	100	1,80	900,00	720,00	1.350,00	2.970,00	
		Kota Pariaman	1	2	7	Unit	100	1,80	180,00	180,00	378,00	738,00	
		Kota Solok			3	Unit	100	1,80	-	-	162,00	162,00	
		Kota Padang Panjang		2	1	Unit	100	1,80	-	180,00	54,00	234,00	
		Kab. Tanah Datar		1		Unit	100	1,80	-	90,00	-	90,00	
		Kab. Padang Pariaman	51	11		Unit	100	1,80	9.180,00	990,00	-	10.170,00	
		Kab. Kepulauan Mentawai				Unit	100	1,80	-	-	-	-	
		Kab. Agam	5	4	7	Unit	100	1,80	900,00	360,00	378,00	1.638,00	
		Kab. Solok			2	Unit	100	1,80	-	-	108,00	108,00	
		Kab. Pasaman		1	2	Unit	100	1,80	-	90,00	108,00	198,00	

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			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
		Kab. Pasaman Barat	4	1		Unit	100	1,80	720,00	90,00	-	810,00	
		Kab. Pesisir Selatan	7	6	7	Unit	100	1,80	1.260,00	540,00	378,00	2.178,00	
	e. Polindes/Puskesri	Kota Padang				Unit	50	1,80	-	-	-	-	
		Kota Pariaman	1	4	5	Unit	50	1,80	90,00	180,00	135,00	405,00	
		Kota Solok				Unit	50	1,80	-	-	-	-	
		Kota Padang Panjang				Unit	50	1,80	-	-	-	-	
		Kab. Tanah Datar		1		Unit	50	1,80	-	45,00	-	45,00	
		Kab. Padang Pariaman	55	4	2	Unit	50	1,80	4.950,00	180,00	54,00	5.184,00	
		Kab. Kepulauan Mentawai				Unit	50	1,80	-	-	-	-	
		Kab. Agam	1	1		Unit	50	1,80	90,00	45,00	-	135,00	
		Kab. Solok				Unit	50	1,80	-	-	-	-	
		Kab. Pasaman				Unit	50	1,80	-	-	-	-	
		Kab. Pasaman Barat	4	2	3	Unit	50	1,80	360,00	90,00	81,00	531,00	
		Kab. Pesisir Selatan	4	2		Unit	50	1,80	360,00	90,00	-	450,00	
	f. Klinik/Poliklinik	Kota Padang			3	Unit	50	1,80	-	-	81,00	81,00	
		Kota Pariaman		1		Unit	50	1,80	-	45,00	-	45,00	
		Kota Solok				Unit	50	1,80	-	-	-	-	
		Kota Padang Panjang				Unit	50	1,80	-	-	-	-	
		Kab. Tanah Datar				Unit	50	1,80	-	-	-	-	
		Kab. Padang Pariaman	10	5	4	Unit	50	1,80	900,00	225,00	108,00	1.233,00	
		Kab. Kepulauan Mentawai				Unit	50	1,80	-	-	-	-	
		Kab. Agam				Unit	50	1,80	-	-	-	-	
		Kab. Solok				Unit	50	1,80	-	-	-	-	
		Kab. Pasaman				Unit	50	1,80	-	-	-	-	
		Kab. Pasaman Barat				Unit	50	1,80	-	-	-	-	
		Kab. Pesisir Selatan				Unit	50	1,80	-	-	-	-	
	g. Pembersihan Puing		170			Unit		31,22	5.307,40			5.307,40	
	i. Penyediaan Tempat Sementara		170					2,50	425,00			425,00	
	j. Pengadaan Peralatan dan Perlengkapan		0,25					118.654,88	29.663,72			29.663,72	
	k. Pemulihan Layanan Kesehatan Ibu dan Anak												
	l. Pengelolaan Limbah Medis Sementara												
	m. Penyediaan Tenaga Medis dan Penyuluh Kesehatan												
	n. Penyediaan Layanan Psikologis dan Trauma												
2. Pendidikan			4.120	2.172	2.080				333.720,00	87.966,00	50.544,00	627.603,39	
	a. TK	Kota Padang	112	130	104	RKB	45	1,80	9.072,00	5.265,00	2.527,20	16.864,20	Dirjen Mandikdasmen
		Kota Pariaman	15	4	7	RKB	45	1,80	1.215,00	162,00	170,10	1.547,10	
		Kota Solok				RKB	45	1,80	-	-	-	-	
		Kota Padang Panjang	6	31	17	RKB	45	1,80	486,00	1.255,50	413,10	2.154,60	
		Kab. Tanah Datar				RKB	45	1,80	-	-	-	-	
		Kab. Padang Pariaman	48	7	48	RKB	45	1,80	3.888,00	283,50	1.166,40	5.337,90	
		Kab. Kepulauan Mentawai				RKB	45	1,80	-	-	-	-	
		Kab. Agam	13	7	5	RKB	45	1,80	1.053,00	283,50	121,50	1.458,00	
		Kab. Solok				RKB	45	1,80	-	-	-	-	
		Kab. Pasaman				RKB	45	1,80	-	-	-	-	

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			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
		Kab. Pasaman Barat				RKB	45	1,80	-	-	-	-	
		Kab. Pesisir Selatan	4	3	0	RKB	45	1,80	324,00	121,50	-	445,50	
									-			-	
	b. Sekolah Dasar	Kota Padang	699	448	354	RKB	45	1,80	56.619,00	18.144,00	8.602,20	83.365,20	
		Kota Pariaman	162	100		RKB	45	1,80	13.122,00	4.050,00	-	17.172,00	
		Kota Solok	0	4	0	RKB	45	1,80	-	162,00	-	162,00	
		Kota Padang Panjang	15	65	84	RKB	45	1,80	1.215,00	2.632,50	2.041,20	5.888,70	
		Kab. Tanah Datar			2	RKB	45	1,80	-	-	48,60	48,60	
		Kab. Padang Pariaman	1469	243	430	RKB	45	1,80	118.989,00	9.841,50	10.449,00	139.279,50	
		Kab. Kepulauan Mentawai				RKB	45	1,80	-	-	-	-	
		Kab. Agam	347	196	174	RKB	45	1,80	28.107,00	7.938,00	4.228,20	40.273,20	
		Kab. Solok	17	2	13	RKB	45	1,80	1.377,00	81,00	315,90	1.773,90	
		Kab. Pasaman	1		9	RKB	45	1,80	81,00	-	218,70	299,70	
		Kab. Pasaman Barat	21	35	9	RKB	45	1,80	1.701,00	1.417,50	218,70	3.337,20	
		Kab. Pesisir Selatan	88	71	106	RKB	45	1,80	7.128,00	2.875,50	2.575,80	12.579,30	
									-			-	
	c. Sekolah Menengah Pertama	Kota Padang	213	124	157	RKB	45	1,80	17.253,00	5.022,00	3.815,10	26.090,10	
		Kota Pariaman	6	16		RKB	45	1,80	486,00	648,00	-	1.134,00	
		Kota Solok		6		RKB	45	1,80	-	243,00	-	243,00	
		Kota Padang Panjang	12	51	35	RKB	45	1,80	972,00	2.065,50	850,50	3.888,00	
		Kab. Tanah Datar		1	1	RKB	45	1,80	-	40,50	24,30	64,80	
		Kab. Padang Pariaman	116	105		RKB	45	1,80	9.396,00	4.252,50	-	13.648,50	
		Kab. Kepulauan Mentawai				RKB	45	1,80	-	-	-	-	
		Kab. Agam	70	38	69	RKB	45	1,80	5.670,00	1.539,00	1.676,70	8.885,70	
		Kab. Solok		9	2	RKB	45	1,80	-	364,50	48,60	413,10	
		Kab. Pasaman	1	0	1	RKB	45	1,80	81,00	-	24,30	105,30	
		Kab. Pasaman Barat	11	30	6	RKB	45	1,80	891,00	1.215,00	145,80	2.251,80	
		Kab. Pesisir Selatan	5	40	61	RKB	45	1,80	405,00	1.620,00	1.482,30	3.507,30	
									-			-	
	d. Sekolah Menengah Atas	Kota Padang	308	149	151	RKB	45	1,80	24.948,00	6.034,50	3.669,30	34.651,80	
		Kota Pariaman	3	8		RKB	45	1,80	243,00	324,00	-	567,00	
		Kota Solok		1		RKB	45	1,80	-	40,50	-	40,50	
		Kota Padang Panjang	3	25	15	RKB	45	1,80	243,00	1.012,50	364,50	1.620,00	
		Kab. Tanah Datar	1			RKB	45	1,80	81,00	-	-	81,00	
		Kab. Padang Pariaman	83	31		RKB	45	1,80	6.723,00	1.255,50	-	7.978,50	
		Kab. Kepulauan Mentawai				RKB	45	1,80	-	-	-	-	
		Kab. Agam	84	38	92	RKB	45	1,80	6.804,00	1.539,00	2.235,60	10.578,60	
		Kab. Solok		2		RKB	45	1,80	-	81,00	-	81,00	
		Kab. Pasaman				RKB	45	1,80	-	-	-	-	
		Kab. Pasaman Barat		23		RKB	45	1,80	-	931,50	-	931,50	
		Kab. Pesisir Selatan	13	16	28	RKB	45	1,80	1.053,00	648,00	680,40	2.381,40	
									-			-	
	e. Sekolah Menengah Kejuruan	Kota Padang	114	53	15	RKB	45	1,80	9.234,00	2.146,50	364,50	11.745,00	
		Kota Pariaman	7	9		RKB	45	1,80	567,00	364,50	-	931,50	
		Kota Solok		3		RKB	45	1,80	-	121,50	-	121,50	
		Kota Padang Panjang	11	19	16	RKB	45	1,80	891,00	769,50	388,80	2.049,30	
		Kab. Tanah Datar	1		1	RKB	45	1,80	81,00	-	24,30	105,30	
		Kab. Padang Pariaman	9	2		RKB	45	1,80	729,00	81,00	-	810,00	
		Kab. Kepulauan Mentawai				RKB	45	1,80	-	-	-	-	
		Kab. Agam	3	8	51	RKB	45	1,80	243,00	324,00	1.239,30	1.806,30	
		Kab. Solok		4		RKB	45	1,80	-	162,00	-	162,00	
		Kab. Pasaman				RKB	45	1,80	-	-	-	-	
		Kab. Pasaman Barat	14	5	7	RKB	45	1,80	1.134,00	202,50	170,10	1.506,60	
		Kab. Pesisir Selatan	10	9	10	RKB	45	1,80	810,00	364,50	243,00	1.417,50	
									-			-	

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Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
	f. Sekolah Luar Biasa	Kota Padang	1	1		RKB	45	1,80	81,00	40,50	-	121,50	
		Kota Pariaman	4			RKB	45	1,80	324,00	-	-	324,00	
		Kota Solok				RKB			-			-	
		Kota Padang Panjang				RKB			-			-	
		Kab. Tanah Datar				RKB			-			-	
		Kab. Padang Pariaman				RKB			-			-	
		Kab. Kepulauan Mentawai				RKB			-			-	
		Kab. Agam				RKB			-			-	
		Kab. Solok				RKB			-			-	
		Kab. Pasaman				RKB			-			-	
		Kab. Pasaman Barat				RKB			-			-	
		Kab. Pesisir Selatan				RKB			-			-	
	f. Pendidikan Luar Sekolah	Kota Padang	17	1		RKB	45	1,80	1.377,00	40,50	-	1.417,50	
		Kota Pariaman				RKB	45	1,80	-	-	-	-	
		Kota Solok				RKB	45	1,80	-	-	-	-	
		Kota Padang Panjang				RKB	45	1,80	-	-	-	-	
		Kab. Tanah Datar		1		RKB	45	1,80	-	40,50	-	40,50	
		Kab. Padang Pariaman	70	9	4	RKB	45	1,80	5.670,00	364,50	97,20	6.131,70	
		Kab. Kepulauan Mentawai				RKB	45	1,80	-	-	-	-	
		Kab. Agam				RKB	45	1,80	-	-	-	-	
		Kab. Solok				RKB	45	1,80	-	-	-	-	
		Kab. Pasaman				RKB	45	1,80	-	-	-	-	
		Kab. Pasaman Barat				RKB	45	1,80	-	-	-	-	
		Kab. Pesisir Selatan				RKB	45	1,80	-	-	-	-	
	g. Perguruan Tinggi											59.331,44	laporan Unand
	h. Pembersihan Puing		4.120			RKB	1	0,20	824,00			824,00	
												-	
	i. Penyediaan Lokal Belajar sementara		2.060			Lokal		2,50	5.150,00			5.150,00	
	j. Pengadaan Peralatan dan Perlengkapan		0,25			Paket	1	329.913,00	82.478,25			82.478,25	
	k. Penyediaan Tenaga Guru Pengganti												
	l. Penyediaan Layanan Konseling												
	m. Penyediaan Layanan Ketrampilan Hidup												
3. Agama									152.190,00	46.080,00	24.651,00	294.967,08	
	a. Masjid	Kota Padang	109	83	71	Unit	100	1,80	19.620,00	7.470,00	3.834,00	30.924,00	Data Kabupaten/Kota
		Kota Pariaman	125	33	15	Unit	100	1,80	22.500,00	2.970,00	810,00	26.280,00	
		Kota Solok	-	-	-	Unit	100	1,80	-	-	-	-	
		Kota Padang Panjang	6	9	9	Unit	100	1,80	1.080,00	810,00	486,00	2.376,00	
		Kab. Tanah Datar	4	7	1	Unit	100	1,80	720,00	630,00	54,00	1.404,00	
		Kab. Padang Pariaman	140	66	26	Unit	100	1,80	25.200,00	5.940,00	1.404,00	32.544,00	
		Kab. Kepulauan Mentawai	3	5	-	Unit	100	1,80	540,00	450,00	-	990,00	
		Kab. Agam	161	92	97	Unit	100	1,80	28.980,00	8.280,00	5.238,00	42.498,00	
		Kab. Solok	6	21	11	Unit	100	1,80	1.080,00	1.890,00	594,00	3.564,00	
		Kab. Pasaman	-	-	15	Unit	100	1,80	-	-	810,00	810,00	
		Kab. Pasaman Barat	28	29	87	Unit	100	1,80	5.040,00	2.610,00	4.698,00	12.348,00	
		Kab. Pesisir Selatan	10	36	27	Unit	100	1,80	1.800,00	3.240,00	1.458,00	6.498,00	
	b. Musholla	Kota Padang	99	122	112	Unit	50	1,80	8.910,00	5.490,00	3.024,00	17.424,00	

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						Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
				Kota Pariaman		-	-	-	Unit	50	1,80	-	-	-	-	
				Kota Solok		-	-	-	Unit	50	1,80	-	-	-	-	
				Kota Padang Panjang		-	-	-	Unit	50	1,80	-	-	-	-	
				Kab. Tanah Datar		1	3	-	Unit	50	1,80	90,00	135,00	-	225,00	
				Kab. Padang Pariaman		314	89	24	Unit	50	1,80	28.260,00	4.005,00	648,00	32.913,00	
				Kab. Kepulauan Mentawai		-	-	-	Unit	50	1,80	-	-	-	-	
				Kab. Agam		71	30	40	Unit	50	1,80	6.390,00	1.350,00	1.080,00	8.820,00	
				Kab. Solok		-	-	-	Unit	50	1,80	-	-	-	-	
				Kab. Pasaman		1	-	8	Unit	50	1,80	90,00	-	216,00	306,00	
				Kab. Pasaman Barat		-	-	-	Unit	50	1,80	-	-	-	-	
				Kab. Pesisir Selatan		1	14	9	Unit	50	1,80	90,00	630,00	243,00	963,00	
			c.	Gereja	Kota Padang	5	-	1	Unit	100	1,80	900,00	-	54,00	954,00	
					Kota Pariaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kota Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kota Padang Panjang	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Tanah Datar	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Padang Pariaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Kepulauan Mentawai	4	2	-	Unit	100	1,80	720,00	180,00	-	900,00	
					Kab. Agam	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pesisir Selatan	-	-	-	Unit	100	1,80	-	-	-	-	
			d.	Vihara	Kota Padang	1	-	-	Unit	100	1,80	180,00	-	-	180,00	
					Kota Pariaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kota Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kota Padang Panjang	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Tanah Datar	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Padang Pariaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Kepulauan Mentawai	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Agam	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pesisir Selatan	-	-	-	Unit	100	1,80	-	-	-	-	
			e.	Pembersihan Puing		1.089					31,22	33.998,58			33.998,58	
															-	
				Pengadaan Peralatan dan Perlengkapan		0,25					152.190,00	38.047,50			38.047,50	
4.	Lembaga Sosial											11.684,50	450,00	162,75	15.811,56	
			a.	Panti	Kota Padang	9	-	-	Unit	100	1,80	1.620,00	-	-	1.620,00	Data Pemkab/ko
					Kota Pariaman	1	1	-	Unit	100	1,80	180,00	90,00	-	270,00	
					Kota Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kota Padang Panjang	1	-	-	Unit	100	1,80	180,00	-	-	180,00	
					Kab. Tanah Datar	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Padang Pariaman	5	4	1	Unit	100	1,80	900,00	360,00	54,00	1.314,00	
					Kab. Kepulauan Mentawai	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Agam	1	-	-	Unit	100	1,80	180,00	-	-	180,00	
					Kab. Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pesisir Selatan	-	-	-	Unit	100	1,80	-	-	-	-	

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						Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
			b.	Kantor UPT Depsos	Kota Padang	1		1	Unit			8.444,50		108,75	8.553,25	
			c.	Kantor Liga Dakwah	Kota Padang	1		1	Unit	100	1,80	180,00			180,00	
			c.	Pembersihan Puing		19					31,22	593,18			593,18	
															-	
				Pengadaan Peralatan dan Perlengkapan		0,25				1	11684,5	2.921,13			2.921,13	
			d.	Pelayanan Penitipan Anak dan Manula												
			e.	Penyediaan Layanan Ketrampilan Anak dan Manula												
			f.	Penyediaan Layanan Kesehatan dan Trauma Psikologis												
			g.	Penyediaan Air Bersih dan Sanitasi												

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Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
SEKTOR EKONOMI									21.236,00	24.164,80	9.870,00	189.433,43	
1. Pertanian									4.754,00	9.920,00	-	15.861,88	
a. Sawah	Kota Padang	-	-	-	Ha		4,00	-	-	-	-	Data Pemkab/ko
	Kota Pariaman	-	75	-	Ha		4,00	-	150,00	-	150,00	
	Kota Solok	-	-	-	Ha		4,00	-	-	-	-	
	Kota Padang Panjang	-	-	-	Ha		4,00	-	-	-	-	
	Kab. Tanah Datar	-	-	-	Ha		4,00	-	-	-	-	
	Kab. Padang Pariaman	1.126	4.753	-	Ha		4,00	4.504,00	9.506,00	-	14.010,00	
	Kab. Kepulauan Mentawai	-	-	-	Ha		4,00	-	-	-	-	
	Kab. Agam	-	132	-	Ha		4,00	-	264,00	-	264,00	
	Kab. Solok	-	-	-	Ha		4,00	-	-	-	-	
	Kab. Pasaman	-	-	-	Ha		4,00	-	-	-	-	
	Kab. Pasaman Barat	-	-	-	Ha		4,00	-	-	-	-	
	Kab. Pesisir Selatan	-	-	-	Ha		4,00	-	-	-	-	
											-	
b. Perkebunan	Kota Padang										-	
	Kota Pariaman	-	-	-	Ha		5,00	-			-	
	Kota Solok	-	-	-	Ha		5,00	-			-	
	Kota Padang Panjang	-	-	-	Ha		5,00	-			-	
	Kab. Tanah Datar	-	-	-	Ha		5,00	-			-	
	Kab. Padang Pariaman	45	-	-	Ha		5,00	225,00			225,00	
	Kab. Kepulauan Mentawai	-	-	-	Ha		5,00	-			-	
	Kab. Agam	-	-	-	Ha		5,00	-			-	
	Kab. Solok	-	-	-	Ha		5,00	-			-	
	Kab. Pasaman	-	-	-	Ha		5,00	-			-	
	Kab. Pasaman Barat	-	-	-	Ha		5,00	-			-	
	Kab. Pesisir Selatan	5	-	-	Ha		5,00	25,00			25,00	
c. Pengadaan Peralatan dan Perlengkapan		0,25					4.751,50	1.187,88			1.187,88	
d. Penguatan Industri Berbasis Rumah Tangga												
e. Revitalisasi pertanian												
											-	
2. Perikanan									3.307,00	1.414,80	672,00	6.112,55	
a. Tempat Pelelangan Ikan	Kota Padang	2	-	-	Unit	200	1,80	720,00	-	-	720,00	1.764,00
	Kota Pariaman	-	1	1	Unit	200	1,80	-	180,00	108,00	288,00	
	Kota Solok	-	-	-	Unit	200	1,80	-	-	-	-	Data Pemkab/ko
	Kota Padang Panjang	-	-	-	Unit	200	1,80	-	-	-	-	
	Kab. Tanah Datar	-	-	-	Unit	200	1,80	-	-	-	-	
	Kab. Padang Pariaman	-	-	2	Unit	200	1,80	-	-	216,00	216,00	
	Kab. Kepulauan Mentawai	-	-	-	Unit	200	1,80	-	-	-	-	
	Kab. Agam	-	-	-	Unit	200	1,80	-	-	-	-	
	Kab. Solok	-	-	-	Unit	200	1,80	-	-	-	-	
	Kab. Pasaman	-	-	-	Unit	200	1,80	-	-	-	-	
	Kab. Pasaman Barat	-	-	-	Unit	200	1,80	-	-	-	-	
	Kab. Pesisir Selatan	-	3	-	Unit	200	1,80	-	540,00	-	540,00	
Pembersihan Puing		2					62,44	124,88			124,88	
b. Pangkalan Pendaratan Ikan	Kota Padang	-	-	1	Unit	200	1,80	-	-	108,00	108,00	468,00
	Kota Pariaman	-	1	-	Unit	200	1,80	-	180,00	-	180,00	
	Kota Solok	-	-	-	Unit	200	1,80	-	-	-	-	

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						Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
					Kota Padang Panjang	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Tanah Datar	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Padang Pariaman	-	1	-	Unit	200	1,80	-	180,00	-	180,00	
					Kab. Kepulauan Mentawai	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Agam	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Solok	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pesisir Selatan	-	-	-	Unit	200	1,80	-	-	-	-	
				Pembersihan Puing												
			c.	Balai Benih Ikan	Kota Padang	1	-	-	Unit	200	1,80	360,00	-	-	360,00	1.188,00
					Kota Pariaman	-	-	-	Unit	200	1,80	-	-	-	-	
					Kota Solok	-	-	-	Unit	200	1,80	-	-	-	-	
					Kota Padang Panjang	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Tanah Datar	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Padang Pariaman	1	-	1	Unit	200	1,80	360,00	-	108,00	468,00	
					Kab. Kepulauan Mentawai	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Agam	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Solok	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pesisir Selatan	1	-	-	Unit	200	1,80	360,00	-	-	360,00	
															-	
				Pembersihan Puing		3					62,44	187,32			187,32	
			c.	Pasar Ikan	Kota Padang	-	1	-	Unit	200	1,80	-	180,00	-	180,00	180,00
					Kota Pariaman	-	-	-	Unit	200	1,80	-	-	-	-	
					Kota Solok	-	-	-	Unit	200	1,80	-	-	-	-	
					Kota Padang Panjang	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Tanah Datar	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Padang Pariaman	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Kepulauan Mentawai	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Agam	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Solok	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	200	1,80	-	-	-	-	
					Kab. Pesisir Selatan	-	-	-	Unit	200	1,80	-	-	-	-	
				Pembersihan Puing												
			d.	Tambak Ikan	Kota Padang	75,00	-	-	Ha		4,00	300,00	-	-	300,00	1.373,60
					Kota Pariaman	-	2	-	Ha		4,00	-	4,00	-	4,00	
					Kota Solok	-	-	-	Ha		4,00	-	-	-	-	
					Kota Padang Panjang	-	-	-	Ha		4,00	-	-	-	-	
					Kab. Tanah Datar	-	-	-	Ha		4,00	-	-	-	-	
					Kab. Padang Pariaman	221,70	73	20	Ha		4,00	886,80	146,80	24,00	1.057,60	
					Kab. Kepulauan Mentawai	-	-	-	Ha		4,00	-	-	-	-	
				Keramba	Kab. Agam	2	-	-	Ha		4,00	8,00	-	-	8,00	
					Kab. Solok	-	-	-	Ha		4,00	-	-	-	-	
					Kab. Pasaman	-	-	-	Ha		4,00	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Ha		4,00	-	-	-	-	
					Kab. Pesisir Selatan	-	2	-	Ha		4,00	-	4,00	-	4,00	

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			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
	f. Pengadaan Peralatan dan Perlengkapan						0,25	3.307,00	826,75	-	-	826,75	
	g. Revitalisasi perikanan												
3. Peternakan									4.680,00	-	54,00	5.904,00	
	a. Sarana dan Prasarana	Kota Padang	5	-	-	Unit	100	1,80	900,00	-	-	900,00	Data Pemkab/ko
		Kota Pariaman	-	-	-	Unit	100	1,80	-	-	-	-	
		Kota Solok	-	-	-	Unit	100	1,80	-	-	-	-	
		Kota Padang Panjang	-	-	-	Unit	100	1,80	-	-	-	-	
		Kab. Tanah Datar	-	-	-	Unit	100	1,80	-	-	-	-	
		Kab. Padang Pariaman	21	-	1	Unit	100	1,80	3.780,00	-	54,00	3.834,00	
		Kab. Kepulauan Mentawai	-	-	-	Unit	100	1,80	-	-	-	-	
		Kab. Agam	-	-	-	Unit	100	1,80	-	-	-	-	
		Kab. Solok	-	-	-	Unit	100	1,80	-	-	-	-	
		Kab. Pasaman	-	-	-	Unit	100	1,80	-	-	-	-	
		Kab. Pasaman Barat	-	-	-	Unit	100	1,80	-	-	-	-	
		Kab. Pesisir Selatan	-	-	-	Unit	100	1,80	-	-	-	-	
												-	
	b. Pelatihan Ketrampilan Usaha											-	
												-	
	c. Pengadaan Peralatan dan Perlengkapan						0,25	4680,00	1.170,00			1.170,00	
4. Industri									-	-	-	125.600,00	Valuasi BNPB & WB
	Pemulihan Kapasitas Produksi												
	a. Industri Besar	Kota Padang	-	-	2	Unit							
		Kota Pariaman	-	-	-	Unit							
		Kota Solok	-	-	-	Unit							
		Kota Padang Panjang	-	-	-	Unit							
		Kab. Tanah Datar	-	-	-	Unit							
		Kab. Padang Pariaman	-	-	-	Unit							
		Kab. Kepulauan Mentawai	-	-	-	Unit							
		Kab. Agam	-	-	-	Unit							
		Kab. Solok	-	-	-	Unit							
		Kab. Pasaman	-	-	-	Unit							
		Kab. Pasaman Barat	-	-	-	Unit							
		Kab. Pesisir Selatan	-	-	-	Unit							
	b. Industri Menengah	Kota Padang	-	-	2	Unit							
		Kota Pariaman	-	-	-	Unit							
		Kota Solok	-	-	-	Unit							
		Kota Padang Panjang	-	-	-	Unit							
		Kab. Tanah Datar	-	-	-	Unit							
		Kab. Padang Pariaman	-	-	2	Unit							
		Kab. Kepulauan Mentawai	-	-	-	Unit							
		Kab. Agam	-	-	-	Unit							
		Kab. Solok	-	-	-	Unit							
		Kab. Pasaman	-	-	-	Unit							
		Kab. Pasaman Barat	-	-	-	Unit							
		Kab. Pesisir Selatan	-	-	-	Unit							
	c. Industri Kecil	Kota Padang	8	3	15	Unit							
		Kota Pariaman	26	5	2	Unit							

Ekonomi

Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
		Kota Solok	-	-	-	Unit							
		Kota Padang Panjang	-	-	-	Unit							
		Kab. Tanah Datar	-	-	-	Unit							
		Kab. Padang Pariaman	5	8	3	Unit							
		Kab. Kepulauan Mentawai	-	-	-	Unit							
		Kab. Agam	133	8	-	Unit							
		Kab. Solok	-	-	-	Unit							
		Kab. Pasaman	-	-	-	Unit							
		Kab. Pasaman Barat	-	-	-	Unit							
		Kab. Pesisir Selatan	6	-	5	Unit							
	Usaha Mikro	Kab. Pesisir Selatan	7	15	5	Unit							
	d. Pembersihan Puing												
	e. Sewa tempat sementara												
	f. Revitalisasi Peralatan dan Perlengkapan												
	g. Bantuan Skema Pembiayaan Usaha												
5. Perdagangan									1.175,00	260,00	90,00	2.277,00	
	Pasar	Kota Padang	10	1	13	Kios		5,00	50,00	2,50	19,50	72,00	asumsi: 1 pasar = 150 kios
		Kota Pariaman	10	2	2	Kios		5,00	50,00	5,00	3,00	58,00	
		Kota Solok	-	-	4	Kios		5,00	-	-	6,00	6,00	asumsi: 1 kios = Rp. 5 juta
		Kota Padang Panjang	-	-	-	Kios		5,00	-	-	-	-	Data Kabupaten/Kota
		Kab. Tanah Datar	-	-	-	Kios		5,00	-	-	-	-	
		Kab. Padang Pariaman	176	77	12	Kios		5,00	880,00	192,50	18,00	1.090,50	
		Kab. Kepulauan Mentawai	-	-	-	Kios		5,00	-	-	-	-	
		Kab. Agam	9	24	18	Kios		5,00	45,00	60,00	27,00	132,00	kios
		Kab. Solok	1	-	-	Kios		5,00	5,00	-	-	5,00	
		Kab. Pasaman	-	-	-	Kios		5,00	-	-	-	-	
		Kab. Pasaman Barat	1	-	-	Kios		5,00	5,00	-	-	5,00	
		Kab. Pesisir Selatan	28	-	11	Kios		5,00	140,00	-	16,50	156,50	
	Pembersihan Puing		235			Unit		0,20	47,00			47,00	asumsi 200ribu/kios
	Biaya Sewa Sementara		235			Unit	6	0,50	705,00			705,00	sewa 6 bulan
	Bantuan Skema Permodalan												
6. Pariwisata									12.000,00	12.570,00	9.108,00	33.678,00	
	a. Bangunan/Gedung/Obyek Wisata	Kota Padang	-	3	-	Unit	400	3,00	-	1.800,00	-	1.800,00	Data Pemkab/ko
		Kota Pariaman	1	3	-	Unit	400	3,00	1.200,00	1.800,00	-	3.000,00	
		Kota Solok	1	-	-	Unit	400	3,00	1.200,00	-	-	1.200,00	
		Kota Padang Panjang	-	1	2	Unit	400	3,00	-	600,00	720,00	1.320,00	
		Kab. Tanah Datar	-	-	-	Unit	400	3,00	-	-	-	-	
		Kab. Padang Pariaman	1	2	7	Unit	400	3,00	1.200,00	1.200,00	2.520,00	4.920,00	
		Kab. Kepulauan Mentawai	-	-	-	Unit	400	3,00	-	-	-	-	
		Kab. Agam	-	-	-	Unit	400	3,00	-	-	-	-	
		Kab. Solok	-	-	-	Unit	400	3,00	-	-	-	-	
		Kab. Pasaman	-	-	-	Unit	400	3,00	-	-	-	-	
		Kab. Pasaman Barat	-	-	-	Unit	400	3,00	-	-	-	-	
		Kab. Pesisir Selatan	4	5	2	Unit	400	3,00	4.800,00	3.000,00	720,00	8.520,00	

Ekonomi

Sektor / Sub Sektor		Sarana dan Prasarana			Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
						Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
				Restorasi Obyek Wisata												
															-	
			b.	Hotel/Motel/Penginapan	Kota Padang	-	-	-	Unit	400	3,00	-	-	-	-	
					Kota Pariaman	-	-	6	Unit	400	3,00	-	-	2.160,00	2.160,00	
					Kota Solok	-	-	-	Unit	400	3,00	-	-	-	-	
					Kota Padang Panjang	-	1	2	Unit	400	3,00	-	600,00	720,00	1.320,00	
					Kab. Tanah Datar	-	-	-	Unit	400	3,00	-	-	-	-	
					Kab. Padang Pariaman	-	-	-	Unit	400	3,00	-	-	-	-	
					Kab. Kepulauan Mentawai	-	-	-	Unit	400	3,00	-	-	-	-	
					Kab. Agam	-	-	-	Unit	400	3,00	-	-	-	-	
					Kab. Solok	-	-	-	Unit	400	3,00	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	400	3,00	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	400	3,00	-	-	-	-	
					Kab. Pesisir Selatan	-	1	-	Unit	400	3,00	-	600,00	-	600,00	
															-	
			c.	Rumah Makan/Restoran	Kota Padang	-	-	-	Unit	100	1,80	-	-	-	-	
					Kota Pariaman	20	32	42	Unit	100	1,80	3.600,00	2.880,00	2.268,00	8.748,00	
					Kota Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kota Padang Panjang	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Tanah Datar	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Padang Pariaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Kepulauan Mentawai	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Agam	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Solok	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pasaman Barat	-	-	-	Unit	100	1,80	-	-	-	-	
					Kab. Pesisir Selatan	-	1	-	Unit	100	1,80	-	90,00	-	90,00	
			c.	Bangunan Bersejarah/Cagar Budaya	Kota Padang	25	17	23	Unit							
					Kota Pariaman				Unit							
					Kota Solok				Unit							
					Kota Padang Panjang				Unit							
					Kab. Tanah Datar				Unit							
					Kab. Padang Pariaman				Unit							
					Kab. Kepulauan Mentawai				Unit							
					Kab. Agam				Unit							
					Kab. Solok				Unit							
					Kab. Pasaman				Unit							
					Kab. Pasaman Barat				Unit							
					Kab. Pesisir Selatan				Unit							
			d.	Bantuan Skema Permodalan												
															-	

Lintas Sektor

Sektor / Sub Sektor	Sarana dan Prasarana	Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
			Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
LINTAS SEKTOR									533.261,80	265.162,50	204.329,25	1.093.662,75	
1. Lingkungan Hidup									169.625,00	-	-	169.625,00	
	a. Revitalisasi Hutan Lindung	Kab. Agam	4.514	191		Ha							
		Kab. Padang Pariaman	126			Ha			153.125,00			153.125,00	
		Kab. Tanah Datar		1								-	
		Kab. Pesisir Selatan		1		Unit						-	
		Kab. Solok										-	
		Kota Padang		4		Unit						-	
												-	
	b. Revitalisasi Mangrove	Kab. Pesisir Selatan		1		Unit						-	
												-	
	c. Revitalisasi Terumbu Karang	Kab. Agam		1		Pulau						-	
		Kab. Pesisir Selatan		1		Unit						-	
		Kota Padang		1								-	
												-	
	d. Revitalisasi Pantai											-	
												-	
	e. DAS	Kab. Padang Pariaman	5			Km			16.500,00			16.500,00	
	f. Peningkatan kapasitas manajemen lingkungan dalam rehabilitasi dan rekonstruksi												
	g.												
	h.												
2. Pemerintahan									360.216,80	264.307,50	203.600,25	918.178,75	
	a. Kantor Pusat (UPT/Kanwil)	Kota Padang	31	33	70	Unit	1500	3,00	139.500,00	74.250,00	94.500,00	308.250,00	Data WB
		Kota Pariaman	1	-	-	Unit	450	3,00	1.350,00	-	-	1.350,00	
		Kota Solok				Unit	450	3,00	-	-	-	-	
		Kota Padang Panjang			1	Unit	450	3,00	-	-	405,00	405,00	
		Kab. Tanah Datar				Unit	450	3,00	-	-	-	-	
		Kab. Padang Pariaman	1	3	-	Unit	450	3,00	1.350,00	2.025,00	-	3.375,00	
		Kab. Kepulauan Mentawai				Unit	450	3,00	-	-	-	-	
		Kab. Agam	1			Unit	450	3,00	1.350,00	-	-	1.350,00	
		Kab. Solok				Unit	450	3,00	-	-	-	-	
		Kab. Pasaman			1	Unit	450	3,00	-	-	405,00	405,00	
		Kab. Pasaman Barat		1		Unit	450	3,00	-	675,00	-	675,00	
		Kab. Pesisir Selatan			1	Unit	450	3,00	-	-	405,00	405,00	
	Pembersihan Puing		17					62,44	1.061,48	-	-	1.061,48	
	b. Kantor Pemerintah Provinsi	Kota Padang	29	49	51	Unit	1500	3,00	130.500,00	110.250,00	68.850,00	309.600,00	
									-	-	-	-	
	Pembersihan Puing		27					62,44	1.685,88	-	-	1.685,88	
	c. Kantor Pemerintah Kabupaten/Kota	Kota Padang	26	88	35	Unit	450	2,50	29.250,00	49.500,00	11.812,50	90.562,50	
		Kota Pariaman	4	2	2	Unit	450	2,50	4.500,00	1.125,00	675,00	6.300,00	
		Kota Solok			2	Unit	450	2,50	-	-	675,00	675,00	
		Kota Padang Panjang		2	3	Unit	450	2,50	-	1.125,00	1.012,50	2.137,50	
		Kab. Tanah Datar				Unit	450	2,50	-	-	-	-	
		Kab. Padang Pariaman	4	7	4	Unit	450	2,50	4.500,00	3.937,50	1.350,00	9.787,50	
		Kab. Kepulauan Mentawai				Unit	450	2,50	-	-	-	-	
		Kab. Agam	2	-	3	Unit	450	2,50	2.250,00	-	1.012,50	3.262,50	
		Kab. Solok	7	1	3	Unit	450	2,50	7.875,00	562,50	1.012,50	9.450,00	

Lintas Sektor

Sektor / Sub Sektor		Sarana dan Prasarana			Lokasi (Kab/Kota/	Data Kerusakan				Luas/Jumlah Rata-rata (M^2/Unit)	Harga Satuan (Rp. dalam juta)	Nilai Kerusakan (Rp. Juta)			Total Kebutuhan (Rp. Juta)	Keterangan
						Berat	Sedang	Ringan	Satuan			Berat	Sedang	Ringan		
				Kab. Pasaman		1	-	3	Unit	450	2,50	1.125,00	-	1.012,50	2.137,50	
				Kab. Pasaman Barat		-	4	9	Unit	450	2,50	-	2.250,00	3.037,50	5.287,50	
				Kab. Pesisir Selatan		7	12	33	Unit	450	2,50	7.875,00	6.750,00	11.137,50	25.762,50	
			Pembersihan Puing			51					62,44	3.184,44			3.184,44	
		d.	Asrama/Rumah Dinas TNI/POLRI	Kota Padang		159	214	20	Unit	45	1,50	10.732,50	7.222,50	405,00	18.360,00	
				Kota Pariaman		2	18		Unit	45	1,50	135,00	607,50	-	742,50	
				Kota Solok					Unit	45	1,50	-	-	-	-	
				Kota Padang Panjang			7		Unit	45	1,50	-	236,25	-	236,25	
				Kab. Tanah Datar					Unit	45	1,50	-	-	-	-	
				Kab. Padang Pariaman		3	2	2	Unit	45	1,50	202,50	67,50	40,50	310,50	
				Kab. Kepulauan Mentawai			9		Unit	45	1,50	-	303,75	-	303,75	
				Kab. Agam		2	-	-	Unit	45	1,50	135,00	-	-	135,00	
				Kab. Solok					Unit	45	1,50	-	-	-	-	
				Kab. Pasaman					Unit	45	1,50	-	-	-	-	
				Kab. Pasaman Barat					Unit	45	1,50	-	-	-	-	
				Kab. Pesisir Selatan		2		25	Unit	45	1,50	135,00	-	506,25	641,25	
		e.	Kantor Kecamatan/Nagari/Kelurahan	Kota Padang		30	9	7	Unit	100	1,80	5.400,00	810,00	378,00	6.588,00	
				Kota Pariaman				74	Unit	100	1,80	-	-	3.996,00	3.996,00	
				Kota Solok					Unit	100	1,80	-	-	-	-	
				Kota Padang Panjang			2		Unit	100	1,80	-	180,00	-	180,00	
				Kab. Tanah Datar					Unit	100	1,80	-	-	-	-	
				Kab. Padang Pariaman		32	25	18	Unit	100	1,80	5.760,00	2.250,00	972,00	8.982,00	
				Kab. Kepulauan Mentawai					Unit	100	1,80	-	-	-	-	
				Kab. Agam		2	2	-	Unit	100	1,80	360,00	180,00	-	540,00	
				Kab. Solok					Unit	100	1,80	-	-	-	-	
				Kab. Pasaman					Unit	100	1,80	-	-	-	-	
				Kab. Pasaman Barat					Unit	100	1,80	-	-	-	-	
				Kab. Pesisir Selatan					Unit	100	1,80	-	-	-	-	
		f.	Pengadaan Peralatan dan Perlengkapan			0,25					360.216,80	90.054,20			90.054,20	
		g.	Bantuan Teknis Penguatan Kapasitas Pelaksana Rehab-Rekon													
3.	Keuangan dan Perbankan											3.420,00	855,00	729,00	5.859,00	
		a.	Koperasi	Kota Padang		20	10	6	Unit	50	1,80	1.800,00	450,00	162,00	2.412,00	Data Pemkab/ko
				Kota Pariaman					Unit	50	1,80	-	-	-	-	
				Kota Solok					Unit	50	1,80	-	-	-	-	
				Kota Padang Panjang				1	Unit	50	1,80	-	-	27,00	27,00	
				Kab. Tanah Datar					Unit	50	1,80	-	-	-	-	
				Kab. Padang Pariaman		15	7	3	Unit	50	1,80	1.350,00	315,00	81,00	1.746,00	
				Kab. Kepulauan Mentawai					Unit	50	1,80	-	-	-	-	
				Kab. Agam			2	6	Unit	50	1,80	-	90,00	162,00	252,00	
				Kab. Solok					Unit	50	1,80	-	-	-	-	
				Kab. Pasaman					Unit	50	1,80	-	-	-	-	
				Kab. Pasaman Barat				10	Unit	50	1,80	-	-	270,00	270,00	
				Kab. Pesisir Selatan		3		-	Unit	50	1,80	270,00	-	-	270,00	
															-	
			Pegadaian	Kab. Pesisir Selatan				1		50	1,80	-	-	27,00	27,00	
			Pengadaan Peralatan dan Perlengkapan			0,25					3.420,00	855,00			855,00	
															-	
		b.	Bantuan Skema Permodalan												-	

Pengurangan Risiko Bencana

Program dan Kegiatan	Lokasi/Sasaran	Harga Satuan (juta rupiah)	Total
Evaluasi Rencana kontijensi	19	250,00	4.750,00
Penyusunan Protap	19	100,00	1.900,00
Gladi dan simulasi	19	200,00	3.800,00
Permetaan mikro zonasi untuk kegempaan	19	250,00	4.750,00
Kampanye penyadaran publik	19	50,00	950,00
Pembangunan Monumen di Tandike (longsor)	1	300,00	300,00
Pemetaan rawan longsor detail	8	200,00	1.600,00
Perkuatan kelembagaan di masyarakat	19	50,00	950,00
Pembangunan sistem komunikasi	20	50,00	1.000,00
Pembangunan dan perkuatan pusdalops	20	100,00	2.000,00
Fasilitasi pembentukan BPBD	19	250,00	4.750,00
Pembangunan sistem peringatan dini multihasard	19	100,00	1.900,00
Penyusunan Pedoman Zoning Code dan Building Code			
Pembangunan PUSDIKLAT dan Depo	1	5.000,00	5.000,00
Total	**202**		**33.650,00**

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
1.	**Sektor Perumahan**				
	Bangunan Rumah	dihitung dengan menggunakan kebijakan stimulus dari pemerintah sebesar Rp. 15 juta/unit	dihitung dengan menggunakan kebijakan stimulus dari pemerintah sebesar Rp. 10 juta/unit	dihitung dengan menggunakan kebijakan stimulus dari pemerintah sebesar Rp. 1 juta/unit	
	Prasarana Permukiman	dihitung dengan asumsi nilai prasarana permukiman adalah sebesar 15% dari nilai total rumah rusak berat per-kabupaten	dihitung dengan asumsi nilai prasarana permukiman adalah sebesar 15% dari setinggi-tingginya 50% dari nilai total rumah rusak sedang per-kabupaten	dihitung dengan asumsi nilai prasarana permukiman adalah sebesar 15% dari setinggi-tingginya 30% dari nilai total rumah rusak ringan per-kabupaten	
	Hunian Transisi	dihitung dengan asumsi harga satuan unit hunian transisi sebesar Rp. 2 juta, dan hanya diperuntukkan bagi korban dengan rumah rusak berat	tidak ada	tidak ada	
	Air dan Sanitasi Hunian Transisi	dihitung dengan asumsi kebutuhan air dan sanitasi hunian transisi adalah sebesar 15% dari nilai total kebutuhan hunian transisi	tidak ada	tidak ada	
	Penyediaan Lahan Relokasi				Asumsinya adalah akan disediakan oleh Pemerintah Daerah
	Penyediaan PLP Relokasi				Asumsinya adalah mengikuti kebutuhan relokasi
	Bantuan Teknis Pendampingan				Pelayanan teknis bagi masyarakat dalam membangun kembali rumah dengan kaidah dan struktur tahan gempa
	Jaminan Hidup	dinilai dengan asumsi bahwa jumlah rumah rusak berat adalah sebanding dengan jumlah kepala keluarga, dimana satu keluarga berjumlah 4 orang dengan uang lauk pauk sebesar Rp. 3.000/kepala dengan beras 400gram/kepala	tidak ada	tidak ada	
2.	**Sektor Infrastruktur**				
	Transportasi				
	Jalan	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 2 juta/meter	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 1,75 juta/meter	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 1,35 juta/meter	

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Jembatan Nasional dan Kabupaten	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 2 juta/meter	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 1,75 juta/meter	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 1,35 juta/meter	
	Jembatan Kabupaten	dihitung dengan asumsi harga pengadaan dan pembangunan jembatan yang nilai harga rata-rata-nya mencapai Rp. 300juta/ unit jembatan (unit jembatan x harga satuan)	dihitung dengan asumsi setinggi-tingginya sebesar 50% dari harga pengadaan dan pembangunan jembatan yang nilai harga rata-rata-nya mencapai Rp. 300juta/ unit jembatan (50% x unit jembatan x harga satuan)	dihitung dengan asumsi setinggi-tingginya sebesar 30% dari harga pengadaan dan pembangunan jembatan yang nilai harga rata-rata-nya mencapai Rp. 300juta/ unit jembatan (30% x unit jembatan x harga satuan)	
	Drainase Perkotaan	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 1 juta/meter	dihitung dengan asumsi setinggi-tingginya 50% dari harga rata-rata yang digunakan rata-rata yang mencapai Rp. 1 juta/meter (50% x volume x harga satuan)	dihitung dengan asumsi setinggi-tingginya 30% dari harga rata-rata yang digunakan rata-rata yang mencapai Rp. 1 juta/meter (30% x volume x harga satuan)	
	Terminal	dihitung dengan asumsi luas terminal adalah 1.000m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	tidak ada	tidak ada	
	Dermaga				Penilaian diterima dari pemerintah daerah
	Energi				
	Pos dan Telekomunikasi				
	Air dan Sanitasi				
	PDAM				Penilaian dilakukan oleh Tim Bank Dunia
	Infrastruktur Sumberdaya Air				
	Irigasi Teknis	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 2 juta/meter (volume x harga satuan)	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 1,75 juta/meter (volume x harga satuan)	dihitung dengan mengikuti harga satuan yang digunakan rata-rata pemerintah kabupaten sebesar Rp. 1,35 juta/meter (volume x harga satuan)	
	Irigasi Non-Teknis	dihitung dengan asumsi harga satuan rata-rata sebesar Rp. 1 juta/meter (volume x harga satuan)	dihitung dengan asumsi harga satuan rata-rata sebesar Rp. 750 ribu/meter (volume x harga satuan)	dihitung dengan asumsi harga satuan rata-rata sebesar Rp. 500 ribu/meter (volume x harga satuan)	

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Irigasi Sederhana	dihitung dengan asumsi harga satuan rata-rata sebesar Rp. 500 ribu/meter (volume x harga satuan)	dihitung dengan asumsi harga satuan rata-rata sebesar Rp. 300 ribu/meter (volume x harga satuan)	dihitung dengan asumsi harga satuan rata-rata sebesar Rp. 100 ribu/meter (volume x harga satuan)	
3.	**Sektor Sosial**				
	Kesehatan				
	Rumah Sakit (Kota Padang)	dihitung dengan asumsi luas bangunan rumah sakit di kota padang adalah 10.000m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan rumah sakit di kota padang adalah 10.000m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan rumah sakit di kota padang adalah 10.000m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (30% x luas bangunan x harga satuan)	
	Rumah Sakit di Kabupaten/Kota lainnya	dihitung dengan asumsi luas bangunan rumah sakit adalah 5.000m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan rumah sakit adalah 5.000m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan rumah sakit adalah 5.000m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (30% x luas bangunan x harga satuan)	
	Pembersihan Puing Bangunan RS	dihitung dengan asumsi sewa alat berat dan operasional sebanyak 2 unit dengan waktu kerja selama 7 hari (2 x 3,5 juta x 7 hari)+(2 x 960 ribu x 7 hari)	tidak ada	tidak ada	
	Puskesmas	dihitung dengan asumsi luas bangunan puskesmas adalah 200m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan puskesmas adalah 200m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan puskesmas adalah 200m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Puskesmas Pembantu	dihitung dengan asumsi luas bangunan puskesmas pembantu adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan puskesmas pembantu adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan puskesmas pembantu adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Polindes dan Klinik/Poliklinik	dihitung dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Pembersihan Puing	dihitung dengan asumsi sewa alat berat dan operasional sebanyak 1unit dengan waktu kerja selama 7 hari (1 x 3,5 juta x 7 hari)+(1 x 960 ribu x 7 hari)	tidak ada	tidak ada	
	Penyediaan Tempat Sementara	dihitung dengan asumsi sewa tempat sementara selama sebulan dengan nilai sewa sebesar Rp. 2,5 juta (jumlah bangunan rusak berat x 1 bulan x Rp. 2,5 juta)	tidak ada	tidak ada	
	Pengadaan Peralatan dan Perlengkapan	pengadaan peralatan dan perlengkapan dihitung dengan asumsi sebesar 25% dari total nilai kebutuhan pembangunan infrastruktur	tidak ada	tidak ada	
	Pendidikan				
	Ruang Kelas Belajar	dihitung dengan asumsi luas Ruang Kelas Belajar adalah 45m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas Ruang Kelas Belajar adalah 45m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas Ruang Kelas Belajar adalah 45m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Pembersihan Puing	dihitung dengan asumsi kebutuhan pembersihan puing senilai Rp. 200 ribu per-ruang kelas belajar (ruang kelas belajar x Rp. 200 ribu)	tidak ada	tidak ada	
	Penyediaan Lokal Belajar Sementara	dihitung dengan asumsi bahwa 1 lokal belajar sementara sama dengan 2 ruang kelas belajar dengan nilai lokal belajar sementara sebesar Rp. 2,5 juta	tidak ada	tidak ada	

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Pengadaan Peralatan dan Perlengkapan	pengadaan peralatan dan perlengkapan dihitung dengan asumsi sebesar 25% dari total nilai kebutuhan pembangunan infrastruktur	tidak ada	tidak ada	
	Agama				
	Masjid, Gereja, Vihara	dihitung dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Musholla	dihitung dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Pembersihan Puing	dihitung dengan asumsi sewa alat berat dan operasional sebanyak 1unit dengan waktu kerja selama 7 hari (1 x 3,5 juta x 7 hari)+(1 x 960 ribu x 7 hari)			
	Lembaga Sosial				
	Bangunan Panti	dihitung dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
4.	**Sektor Ekonomi**				
	Pertanian				

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Lahan Pertanian	dihitung dengan asumsi biaya produksi pertanian adalah sebesar Rp. 4 juta/hektar (luas lahan pertanian x harga satuan produksi/hektar)	dihitung setingi-tingginya 50% dari total biaya produksi, dengan asumsi biaya produksi pertanian adalah sebesar Rp. 4 juta/hektar (50% x luas lahan pertanian x harga satuan produksi/hektar)	dihitung setingi-tingginya 30% dari total biaya produksi, dengan asumsi biaya produksi pertanian adalah sebesar Rp. 4 juta/hektar (30% x luas lahan pertanian x harga satuan produksi/hektar)	
	Lahan Perkebunan	dihitung dengan asumsi biaya produksi pertanian adalah sebesar Rp. 5 juta/hektar (luas lahan pertanian x harga satuan produksi/hektar)	dihitung setingi-tingginya 50% dari total biaya produksi, dengan asumsi biaya produksi pertanian adalah sebesar Rp. 5 juta/hektar (50% x luas lahan pertanian x harga satuan produksi/hektar)	dihitung setingi-tingginya 30% dari total biaya produksi, dengan asumsi biaya produksi pertanian adalah sebesar Rp. 5 juta/hektar (30% x luas lahan pertanian x harga satuan produksi/hektar)	
	Pengadaan Peralatan dan Perlengkapan	pengadaan peralatan dan perlengkapan dihitung dengan asumsi sebesar 25% dari total nilai kebutuhan biaya produksi	tidak ada	tidak ada	
	Perikanan				
	Infrastruktur /Bangunan	dihitung dengan asumsi luas bangunan adalah 200m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 200m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 200m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Perikanan Tambak	dihitung dengan asumsi biaya produksi perikanan tambak adalah sebesar Rp. 4 juta/hektar (luas lahan perikanan tambak x harga satuan produksi/hektar)	dihitung setingi-tingginya 50% dari total biaya produksi, dengan asumsi biaya produksi perikanan tambak adalah sebesar Rp. 4 juta/hektar (50% x luas lahan perikanan tambak x harga satuan produksi/hektar)	dihitung setingi-tingginya 30% dari total biaya produksi, dengan asumsi biaya produksi perikanan tambak adalah sebesar Rp. 4 juta/hektar (30% x luas lahan perikanan tambak x harga satuan produksi/hektar)	
	Peternakan				
	Sarana dan Prasarana/Bangunan	dihitung dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Industri				

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Industri Besar				Belum dilakukan valuasi
	Industri Menengah				Belum dilakukan valuasi
	Industri Kecil				Belum dilakukan valuasi
	Perdagangan				
	Pasar	dihitung dengan asumsi bahwa 1 pasar terdiri dari 150 kios dengan harga 1 kios adalah Rp. 5 juta atau sama dengan Rp. 750 juta/unit pasar	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi bahwa 1 pasar terdiri dari 150 kios dengan harga 1 kios adalah Rp. 5 juta atau sama dengan Rp. 750 juta/unit pasar (50% x harga perunit bangunan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi bahwa 1 pasar terdiri dari 150 kios dengan harga 1 kios adalah Rp. 5 juta atau sama dengan Rp. 750 juta/unit pasar (30% x harga perunit bangunan)	
	Pembersihan Puing	dihitung dengan asumsi sewa alat berat dan operasional sebanyak 2 unit dengan waktu kerja selama 7 hari (2 x 3,5 juta x 7 hari)+(2 x 960 ribu x 7 hari)	tidak ada	tidak ada	
	Sewa Tempat Sementara	dihitung dengan asumsi sebesar 10% dari nilai pembangunan infrastruktur rusak berat	tidak ada	tidak ada	
	Pariwisata				
	Hotel/Penginapan	dihitung dengan asumsi luas bangunan adalah 400m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 400m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 400m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (30% x luas bangunan x harga satuan)	
	Rumah Makan/Restoran	dihitung dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
5.	**Lintas Sektor**				
	Lingkungan Hidup				
	Pemerintahan				

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Kantor Pusat/UPT/Kanwil (Kota Padang)	dihitung dengan asumsi luas bangunan adalah 1.500m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 1.500m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 1.500m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (30% x luas bangunan x harga satuan)	
	Kantor Pusat/UPT/Kanwil (Kabupaten/Kota lainnya)	dihitung dengan asumsi luas bangunan adalah 450m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 450m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 450m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (30% x luas bangunan x harga satuan)	
	Pembersihan Puing	dihitung dengan asumsi sewa alat berat dan operasional sebanyak 2 unit dengan waktu kerja selama 7 hari (2 x 3,5 juta x 7 hari)+(2 x 960 ribu x 7 hari)	tidak ada	tidak ada	
	Kantor Pemerintah Provinsi	dihitung dengan asumsi luas bangunan adalah 1.500m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 1.500m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 1.500m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (30% x luas bangunan x harga satuan)	
	Pembersihan Puing	dihitung dengan asumsi sewa alat berat dan operasional sebanyak 2 unit dengan waktu kerja selama 7 hari (2 x 3,5 juta x 7 hari)+(2 x 960 ribu x 7 hari)	tidak ada	tidak ada	

Tabel Asumsi Penilaian

No.	Sektor/Sub-Sektor	Asumsi Penilaian			Keterangan
		Rusak Berat	Rusak Sedang	Rusak Ringan	
	Kantor Pemerintah Kabupaten/Kota	dihitung dengan asumsi luas bangunan adalah 450m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 450m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 450m2 dengan harga satuan biaya pembangunan bangunan tidak sederhana sebesar Rp. 3 juta/m2 (30% x luas bangunan x harga satuan)	
	Pembersihan Puing	dihitung dengan asumsi sewa alat berat dan operasional sebanyak 2 unit dengan waktu kerja selama 7 hari (2 x 3,5 juta x 7 hari)+(2 x 960 ribu x 7 hari)	tidak ada	tidak ada	
	Asrama TNI/POLRI	dihitung dengan asumsi luas bangunan adalah 45m2 dengan harga satuan biaya pembangunan bangunan rumah sebesar Rp. 1,5 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 45m2 dengan harga satuan biaya pembangunan bangunan rumah sebesar Rp. 1,5 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 45m2 dengan harga satuan biaya pembangunan bangunan rumah sebesar Rp. 1,5 juta/m2 (30% x luas bangunan x harga satuan)	
	Kantor Kecamatan/Nagari/Kelurahan	dihitung dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 100m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	
	Pengadaan Peralatan dan Perlengkapan	pengadaan peralatan dan perlengkapan dihitung dengan asumsi sebesar 25% dari total nilai kebutuhan biaya produksi	tidak ada	tidak ada	
	Keuangan dan Perbankan				
	Bangunan Koperasi	dihitung dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (luas bangunan x harga satuan)	dihitung setinggi-tingginya 50% dari nilai bangunan, dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (50% x luas bangunan x harga satuan)	dihitung setinggi-tingginya 30% dari nilai bangunan, dengan asumsi luas bangunan adalah 50m2 dengan harga satuan biaya pembangunan bangunan sederhana sebesar Rp. 1,8 juta/m2 (30% x luas bangunan x harga satuan)	